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DEVOTED TO STEAM AND ELECTRIC RAILWAY, MARINE,
GRAIN ELEVATOR, EXPRESS, TELEGRAPH AND
CONTRACTORS' INTERESTS

vol. 11

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THE

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TORONTO, CANADA, JANUARY, 1908.

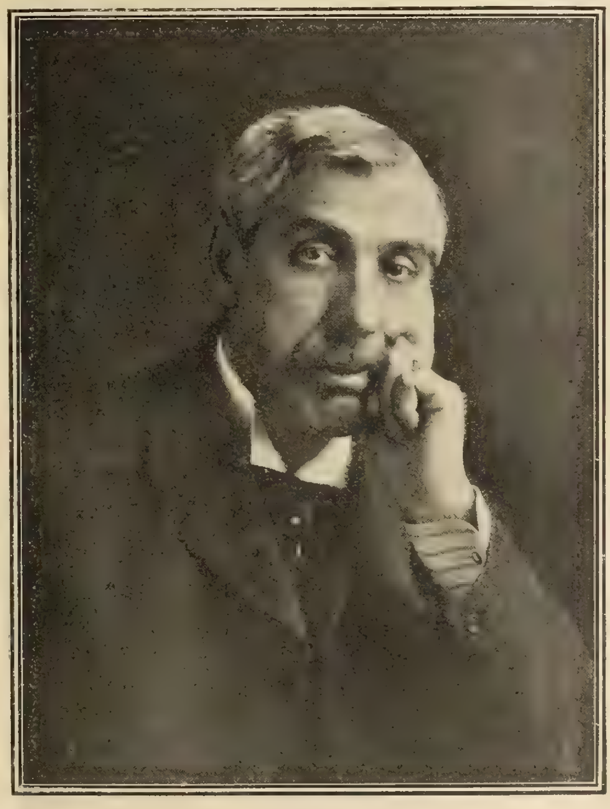
For Subscription Rates, See page 39.

Western Transportation Problems.

The Empire Club of Toronto entertained at luncheon, recently, D. B. Hanna, Third Vice-President Canadian Northern Ry., and President Canadian Northern Quebec Ry. and Quebec and Lake St. John Ry., who spoke as follows:

The commercial history of Western Canada begins in 1670, with the charter by which Charles the Second constituted Prince Rupert and seventeen of his friends "The Governor and Company of Adventurers Trading into Hudson's Bay," and permitted them to trade over an area of 2,500,000 square miles. For these tremendous privileges their only obligation to the monarch was to supply him annually with two elk and two black beaver from the country over which they practically assumed sovereign rights. The toll of elk and beaver has long since been superseded by a less picturesque method of making annual reports. The difference between the elk and beaver of the Governor and Company of Adventurers and the voluminous reports of the Canadian Pacific Railway, the Canadian Northern Railway, and other large concerns is the difference between Western Canada without transportation and Western Canada with transportation.

In the discussions of an empire club there is room, I think, for enquiry into one of the most remarkable characteristics of the race to which we belong—I mean the pioneering instinct. It has made us what we are. Why do men carry implements and wives into the far country of the Peace River when a thousand miles nearer, the best market for their produce, there are square miles of fertile land to be obtained for the asking? A gentleman, whom I will not name, was asked if he would sell, at a magnificent profit, his interests in a railway system. His answer was, "No, I like building railways." Now, the instinct of the Peace River agriculturist is vitally the same as that of the railway projector. Each is the complement of the other, and each contributes to the newness of life that comes to the migrating millions of the race without which no empire can save itself alive. The impulse that brings my fellow-countrymen to Canada is not always the desire to acquire a little money. It is rather the reassertion of the elemental quality in virile mankind, which, first in the garden was impelled to subdue the earth, and later founded colonies and transplanted empires across the face of the planet. Abraham trekked out of Ur of the Chaldees under Divine direction. Thousands of settlers in the Canadian west were moved by the same influence, though they didn't recognize it in the lantern lectures of the Dominion Government's agents, or the restrained advertisements of steamship and railway companies.



D. B. HANNA,
Third Vice-President Canadian Northern Ry., President Canadian Northern Quebec Ry. and Quebec & Lake St. John Ry.

It is a profitable exercise occasionally to dip into the earlier literature of the Prairie Provinces of to-day. To glance over the prophecy of a living general in the British Army—Sir William Butler—written in "The Great Lone Land" in 1871, as you cross Manitoba, Saskatchewan and Alberta in a luxurious train, is to make you fairly well satisfied with what has been accomplished. Butler trailed from Fort Garry to Edmonton and Macleod, and returned over Saskatchewan ice. Reading his book you breathe an atmosphere of isolation, not to say desolation. But in the middle of it there is the prediction of settlement and abounding grain fields—a prediction fulfilled in his own time. Butler's journey was made just 200 years after the charter of the Company of Adventurers was granted. The intervening years had seen the company's work spread over a vast, immeasurable territory, and had produced Lord Selkirk's heroic efforts to found an agricultural community, imported via Hudson's Bay to the Red River. But there was a majestic vacancy about the whole land. Even when a corner of the country had become sufficiently civilized to need an armed force to dissipate political rebellion the white population was pitifully sparse. The advance guard of ploughmen pioneers from the east soon afterwards, however, began to break through the woods and waters of the Dawson route. But, there could be no real advance so long as the Red River and the Dawson route governed the going out and coming in of the people. Men looked for railways as eagerly as a lost voyageur looks for the dawn. They got the railways; but they have never been satisfied with them; and never will be so long as there is a railway builder in whom the pioneering instinct expresses itself in parallel lines of steel and in reduced passenger and freight rates.

The Canadian Pacific Railway in this connection is the forerunner of us all. The early promoters of that great corporation have never, I think, received all the credit due for their marvellous and successful effort to bind the east with the west. Remember the conditions under which that great enterprise was accomplished. Between settled Ontario and the prairies there was a wilderness of poverty. Between the prairies and the Pacific were ranges of mountains which many people thought no combination of engineer and capitalist could penetrate. The end-all of the scheme was foreseen by some excellent men to be unpaid bills for axle grease. Financially, the times were unpropitious. In 1879 Sir Sandford Fleming felt compelled in view of what he considerately called "the necessities of the situation" to advise the Minister of Public Works to "establish a great territorial road on the site of the main line of the Pacific Railway from Lake Nipissing to the north side of Lake Superior."

When, in 1881, the first Canadian Pacific Railway rails were laid west of Winnipeg, the white population between the western boundary of Ontario and the Rocky Mountains, and between the United States boundary and the Arctic Circle was 66,161. Manitoba contained 59,187 whites, of whom 8,000 were in Winnipeg, and several thousands were brought in by railway contractors. The true population indicator of that time is the fact that in the Northwest Territories there were only 6,974 whites, practically all living on the fur trade and business with 49,500 Indians. It was only in 1876 that civil government was organized in the Territories, and Governor Laird, who took up his abode at the new-founded Battleford, and who still lives in Winnipeg, has described the perilous conditions under which he journeyed officially to Fort Macleod, which is now in the fall wheat section of Southern Alberta. Elim-

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PRESIDENT.

inating British Columbia, then, the C.P.R. in 1881 began to open up territory 900 miles long and 300 miles wide—taking roughly the Saskatchewan valley as the northern frontier —with a population of 66,000, or one-fourth of a civilized person to the square mile. But in the Territories, or three-fourths of the prairie country, there was only one white person for every 35 square miles of cultivable land. It was not an inviting prospect for men of faint heart and little faith. The Canadian Pacific builders were of another sort. True the company was given an unprecedented stake in the possibilities of the west, but its early history was one of hard times, and for years was a load of care to those who had riveted to it all of their own fortunes and as much of the fortunes of other people as they could attract to their cause. That it is to-day an enterprise of which all Canadians are proud is gratifying alike to the Dominion and to the company.

Look at some facts that shine with Canadian Pacific history: Beginning with 1881, the growth of white population in 25 years has been as follows:

	1881	1906	
Manitoba	59,187	365,688	
Saskatchewan and Alberta	6,974	257,763	Sask.
		185,412	Alberta.
Total	66,161	808,863	

A multiplication of twelve in twice as many years should satisfy the worst enemy of race suicide. Quite as illuminating as the growth of population are the immigration returns, which show that during the year ended June, 1896, the total immigration to Canada was 16,835, and in the year ended June, 1907, it was 256,000. But this century had come in before the immigration reached 50,000 in a year. In 1901-2 it was 67,379, and in 1902-3 it reached 128,364.

Equally illuminating is the growth of actual settlers located on free lands granted by the Dominion of Canada. Thirty years ago, or in 1877, 845 homestead entries were made, aggregating 135,200 acres (a homestead is 160 acres), but 54% of the entries were subsequently cancelled, the duties required under the Homestead Act not having been complied with and the land reverted to the Government. Five years later, in 1882, when the railway reached Brandon, the homestead entries were 7,483, representing 1,197,280 acres, with cancellations of 47%. Twenty years later, in 1902, the western country had passed the experimental stage, and the larger movement of settlers was in full swing. Then began what has often been called the "American invasion," and that year, in addition to hundreds of thousands of acres of land sold by land companies to actual settlers, 22,215 homestead entries, representing 3,554,400 acres have been made. The figures are as follows:

	Homestead Entries.	Average.
1903	32,682	5,229,120
1904	26,513	4,242,080
1905	34,645	5,643,200
1906	42,012	6,721,920
1907 (10 months)	25,305	4,048,800

Up to the end of June, 1907, it may be conservatively estimated that over 30,000,000 acres of land have been granted by the Crown to legitimate settlers in Manitoba, Alberta and Saskatchewan. Add to this acreage the sales made by railway companies and land companies of approximately 20,000,000 acres, and it is not difficult to foresee that the Canadian West must soon become the bread basket for the world. The Surveyor-General of Canada estimates that in Saskatchewan and Alberta alone there is a total land area, after deducting 30,080,000 acres for water, of 324,125,440 acres, of which he says 106,240,000 acres are suitable for growing grain, the remainder being suitable for ranches and mixed farming. The influx of people and occupation of land have been coincident with railway expansion on the prairie itself, to say nothing of what has been done elsewhere to serve the west. The Comptroller of Railway Statistics informs me that this year there are in Manitoba 2,823 miles of railway, and in Alberta and Saskatchewan 3,173, a total of 5,996, with hundreds of miles under construction.

The great expansion in immigration in 1902-3 was in a most remarkable degree coincident with the extension of the railway with which I am associated. The Canadian Northern claims no special credit for the phenomenal increase in immigration; but it cannot dispute the fact that the rapid development of the enterprise opened up a wide and fertile territory and made it possible for the great influx of new settlers to locate on free or cheap lands near to markets and general supplies.

I am not here to laud the particular enterprise to which I devote my working hours, or to defend it from criticism to which, in common with other systems, it is subjected. But as it is essentially a Canadian undertaking, projected and governed by typical Ontario men—may I localize it and say Toronto men —it is perhaps not unfitting that some note should be taken of what has actually been accomplished to meet such a situation as is embedded in the immigration and census figures I have just given. Besides enjoying the privilege, as I do, of being the first officer of the Company in the immediate charge of all its operations from the first day a wheel was turned I am able to speak from a personal knowledge of what has been done. I shall refer exclusively to the lines west of Lake Superior. Ten years ago, in 1897, we operated 100 miles of railway through a then unsettled country. Traffic was light and the train service limited. Our equipment consisted of three locomotives and some 80 cars all told, a working staff of less than 20 men altogether, and a pay-roll for the year under $17,000. The gross revenue for the first year was under $60,000, but it was more than sufficient to pay our debts. During that year we handled 25,700 tons of freight and carried 10,343 passengers. There is nothing particularly impressive in these figures. To-day, or ten years afterwards, we are operating —or shall be, when, in a week or two, the last rails are laid on the Brandon-Regina line— 3,345 miles. We have an equipment of 237 locomotives; 219 passenger cars, including 35 sleeping and dining cars; and about 8,500 freight cars of all kinds. These figures, of course, do not include the large number of locomotives and cars ordered and now in course of construction by the builders. The 20 men of 1897 have become 10,700 in 1907, with a pay-roll of over $5,000,000 a year. And these figures do not include the large construction forces which at times run into thousands of men. The gross earnings are now on a basis of over $10,000,000 a year; the freight handled for the past fiscal year was 1,822,220 tons; and we carried 703,988 passengers. We are accepting freight and passengers for 411 different points west of Port Arthur. If I were dealing with eastern as well as western lines I could tell you that the Canadian Northern has become the second largest railway in Canada. Only a chastened humility prevents me enlarging upon the fact that with 2,990 miles in the west actually in operation, 150 in Ontario, 531 in Quebec, and 431 in Nova Scotia, we have in all 4,059 miles in Canada, whereas the Grand Trunk Ry. has in the Dominion 3,829 miles. I will leave the comparison at that.

To me, however, the most fascinating result of the past ten years of western development is that the Canadian Northern system is responsible for the creation of over 150 townsites, of which at least 125 have been named by our officers and at least 70,000 persons (exclusive of Winnipeg and other large centres) have found homes tributary to that railway. I think it is reasonable to estimate that at least one-third of the growth of Winnipeg in this century is directly due to the business opened up by the Canadian Northern. Let me repeat, we claim no special credit for that. But even railway men are not devoid of the instincts of citizenship and may be allowed to reflect without boasting that they have inaugurated communities wherein the institutions of a free, strong and intelligent people may mature.

The railways which connect Winnipeg with populous Eastern Canada are western lines, inasmuch as without them the west could not be served. They bind the east to the west and the west to the east as nothing else could. They are the abiding symbol of Canadian nationality, and, as they increase in number, they make the nationality the more abiding also. Geography has been liberal to us. It has laid a leviathan responsibility upon our shoulders. The lakes are the friend of the west in summer, but steel is its defence against the rigors of winter. The railways are more vital to the national prosperity than water; for rails can do without the help of navigation, but navigation, of itself, would be helpless against the forces that tend to an identity of interest between the Western United States and the Western Provinces.

The function of railway transportation in the west, then, is to keep open communication with the east. On purely commercial grounds, it is infinitely more important to the east than to the west that it should be so. May we not say that that is true, also, as a matter of sentiment? It is not necessary to argue that the present day prosperity of Eastern Canada is the fruit of transportation in the west. It is conceded, on the one hand, that the rural population of Ontario has declined. On the other hand the manufacturing population of Ontario has enlarged out of all proportion to the increase of Ontario's demand for Ontario-made goods; while the Winnipeg warehouses of eastern manufacturers tell an eloquent story of the origin of modern Canadian growth and pay tribute in the fullest sense to the wisdom of the rail connection with the east. The supreme importance, then, of transportation to this aspect of our national growth is too obvious to be recounted.

If it is true that for Canadian solidarity there must be more and still more communication to and from the west, the principle is equally important imperially. Around this board you habituate yourselves to think imperially. I venture to suggest to you that in the wise elucidation of transportation problems lies the premier aid to strengthening the ties that hold a loosely-compacted body politic together. While statesmen have discussed closer union by half-a-dozen means, the railways of Canada have opened up new country with which, within a decade, has afforded homes and new prospects to 400,000 British-born people, whose experience has doubly enriched the Empire through its reflex action upon the friends they left behind. There is room for millions more, thanks to the same pioneering agencies. It is not necessary to discuss the wisdom of "pumping them in" before you discern the immense worth, to the Empire as a whole, of the access that has been afforded the resources of the Dominion by the railways of the Dominion.

In the United Kingdom a great deal has been said of late years about the extreme need of having capable business men in public administrative positions. It would be impossible, I suppose, to run the Empire on the principle of strict accountability which governs transportation management. But, if governments made as good a job of dealing with new conditions as, on the whole, the railways do, I venture to believe there would be less complaining in the land, and fewer thorny and perplexing problems for members of empire clubs to ponder. The statesmen have the advantage of us every

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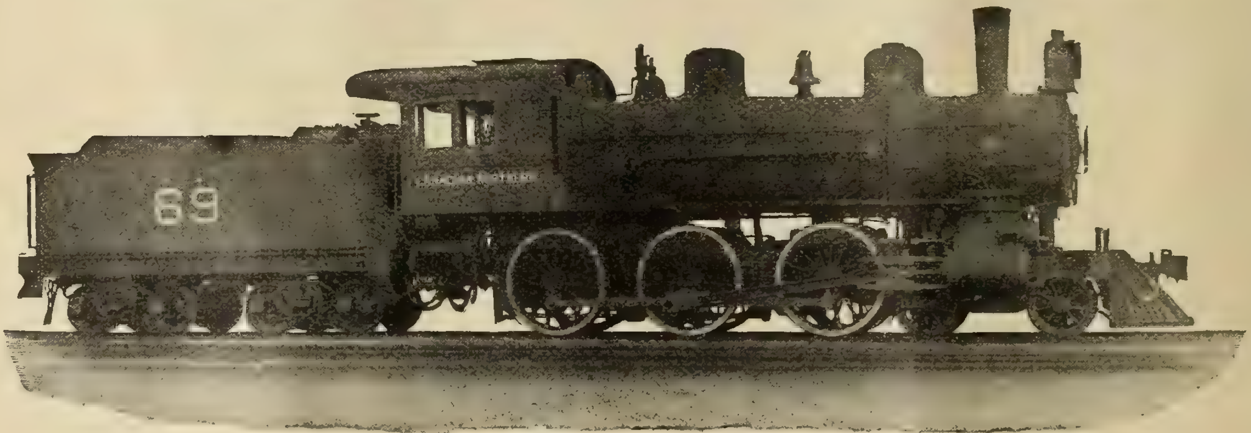

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time. Governments who do your imperial will get all the money they need, and do not spend anxious nights trying to discover the relation of labor demands and of the increased cost of materials to net earnings. They produce pay-rolls, as the precocious youngster told his sister the Lord produced kittens—the Lord just says, "Let there be kittens, and there are kittens."

We are beset by so many trials that we have scarcely time to complain. Our managers' offices become the constant meccas of trainmen, trackmen, telegraphists, skilled and unskilled men, looking for more pay, and saying, "We can't be happy till we get it," while the hosts of men who serve the railways and, on the whole, serve them well, all the time desire to take more money from the till; the passengers, if two or three newspapers can be believed, want to put less in it. In the west there is a mile of railway for every 134 people. In Great Britain there is a mile for every 1,911 people, and perhaps 70% of the employes do not receive $5 a week, yet we are asked to carry passengers at the same rate as the English railways. Really, gentlemen, I think the statesmen who have only to say "Let there be revenue," and there is revenue, are to be envied. But we have no time even to become envious, and are lucky to find the opportunity to tell part of the truth about ourselves. To-day I shall feel compensated for breaking out in an unfamiliar and dangerous role if I have assisted any of you to think more kindly of the railway enterprises that have brought some of the hidden treasures of the west to the generous hearths of the east, and to appreciate some of the difficulties that daily crowd upon them.

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Index to Our 1907 Volume.

The four last pages of this issue contain an index to the Railway and Marine World from Jan. to Dec., 1907, both inclusive.

These pages can be detached from this issue for the purpose of binding with the issues for 1907.

This is the first index we have prepared, and it will doubtless prove of great value to the many subscribers who keep the paper for permanent reference.

A glance over the index will show the wide range of matter we publish and how thoroughly our paper covers its field.

A volume of 952 pages for the year is something that we feel proud of, and that we know our readers appreciate.

◆

Intercolonial Railway Extension.

At the opening of this session of the Dominion Parliament Hon. H. R. Emmerson, ex-Minister of Railways, gave notice that he would move in the House of Commons as follows: "Resolved, that in the opinion of this House it is desirable in furtherance of the transportation interests of the Dominion that the sphere of influence of the Intercolonial Ry. as a Government-operated railway should be widened and extended by securing, by lease or otherwise, such of the branch lines of railway now connecting with the Intercolonial as will serve as direct and profitable feeders to the traffic of the said railway, and by providing for the extension of the Government operation of the said railway to the industrial centres of Western Canada, and to a point or points on the Great Lakes of Canada, either by construction of an extension of the same to such points, or by securing such running rights over existing lines as will enable the Intercolonial Ry. to extend its transportation facilities westward, with a view of stimulating and promoting internal and inter-provincial traffic and of facilitating import and export trade of the Dominion through Canadian channels."

The Work of the Freight Traffic Department.

By John Pullen, Assistant Freight Traffic Manager G.T.R.

The first portion of this article was published in our December, 1907, issue.

In this brief paper it is possible to mention only a few of the factors which enter into rate construction. Distance is one. The rate is the unit of compensation for the service performed. Obviously then, the rate should increase with the distance, but distance alone does not determine the rate. Oftentimes, the element of distance must be dropped as the result of competition, either of water or of a rival rail line. If there be two or more railways between two given points, and the distance by one is longer than by the other, the railway having the longer route must, of necessity, carry its freight between these two points at as low a rate as its rival, which may be fortunate enough to have the shorter line. If a railway parallels navigable waterways, then its rates must, of necessity, be kept down to the lowest possible figure, otherwise all the traffic would be attracted to the water routes. In both these cases the element of mileage must be eliminated—competition, not the railway, determines the rate. Rival trade centers, though some distance apart, keenly competing in certain territory for the same trade, must often be given the same freight rates, otherwise one flourishes and the other will languish. To do this, distance must be disregarded. It would be unfair to reply that this lower rate proves that the railway can carry freight at less than the ordinary rate. It does not make this lower rate because it can well afford to do so, but because it must do so or haul its trains empty. It accepts a partial instead of a total loss.

The cost of the service is another factor, but as the cost is sometimes difficult to ascertain with mathematical exactness, and as the cost may differ on competing lines, or in different sections of the country, it is not always a determining factor, but only a guide to fix the point below which one may not go. Here again, competition comes in to determine the maximum rate which can be charged. The value of the commodity carried is another important factor, because it determines the extent of the risk which the carrier is often obliged to assume under its bill of lading. Thus Cobalt silver ore, which, it is said, is sometimes worth $50,000 a carload, ought to pay a higher freight rate than a carload of sand, which may not be worth $50 a carload, though the weight carried and the length of the haul may be precisely the same. The average weight loaded per car is another factor taken into consideration for the purpose of securing a reasonable revenue for the service rendered. Thus, a higher charge per hundred pounds must be made on paper boxes, which are light and bulky, than on pig iron, which is very heavy.

In Canada there is a maximum tariff fixed by law. This tariff is constructed upon a mathematical scale starting with a certain rate per ton per mile for a certain class of traffic for a given distance. As the distance increases the rate per ton gradually diminishes, though the rate itself, expressed in cents per 100 lbs., naturally increases. Each class of traffic, of which there are 10 under the freight classification in use in Canada, has a fixed relation to each other class, and this relation is expressed in terms of percentages. For illustration—5th-class traffic may be the unit, or 100%, and each higher class takes a gradually increasing percentage until the first class is reached at 200%. The lower classes are similarly diminished. Much of the traffic is carried at rates considerably below those in the legal maximum tariff. The duty of the freight department is to create traffic and not to prevent its movement. Whenever it is shown that the legal maximum rates are so high as to check the free movement of some particular commodity, it would be folly for the railways to refuse to reduce them. Then it is that the rates are made "only such as the traffic will bear." A manufacturer recently told me of his experience in trying to sell a certain article of commerce in China. He knew precisely what it cost him to produce his goods at the factory. He knew also what was the selling price in the world's market in China. The difference between the two was what he could afford to pay for the transportation. The railway company confirmed through its own agents in China the selling price there, and made its freight rate low enough to enable the manufacturer to market his product at a profit. That manufacturer was greatly benefited when the railway company fixed its rate on the principle of "what the traffic would bear." There is no possibility of the public being oppressed by such a method of rate-making as this, and yet we often find the railways ruthlessly condemned for exacting from the public "all the traffic will bear."

A well-known writer on railway economics, in describing the factors upon which rates depend, recently said: "Commercial conditions, the exigencies of business, the competition of one product with another product, the competition of one market with another market, the necessity as well as the privilege of developing the latent resources of the territory through which the line runs, or of promoting new industries and thereby increasing the wealth of several communities, these factors make the rates. So strong, indeed, is the force of these elements that a railway is generally compelled to charge very low rates, and in many cases, unreasonably low rates. Rates that will attract traffic and that will enable producers in the territory contiguous to a railway to reach their markets and increase their production must be accepted or the business will not move. That economic laws make railway rates would be a matter of common knowledge if well-known facts were applied."

A glance at the map will show that railway lines cross and recross each other in the thickly-settled parts, and oftentimes closely parallel each other in all sections of the country. The large mercantile centers enjoy the benefit of several railway lines, each eagerly competing for traffic. If all these competitors were to allow the fighting instinct to govern their actions, and if their rivalry was not conducted with some degree of fair play and a spirit of tolerance each towards the other, there would be an utter lack of rate stability and unjust discriminations as between shippers and as between localities would prevail. Merchants and manufacturers would be in a constant state of uncertainty as to what rates their rivals were getting, and prices would be unsettled throughout the entire country. Any reckless competition between carriers would also result in a rapid decline in freight rates, and sooner or later be followed by railway bankruptcy. To avoid such unfortunate occurrences the freight traffic officers have organized committees and associations, through the medium of which matters of common interest are discussed and agreements made which are in harmony with the laws governing common carriers. In some countries the public have become so alarmed at what is alleged to be combinations in restraint of trade that restrictive legislation forbids railway companies making agreements with each other for uniform rules and traffic regulations. Wisely, in Canada, this extreme legislation has not been adopted. Railway associations are here permitted to exist and they serve a

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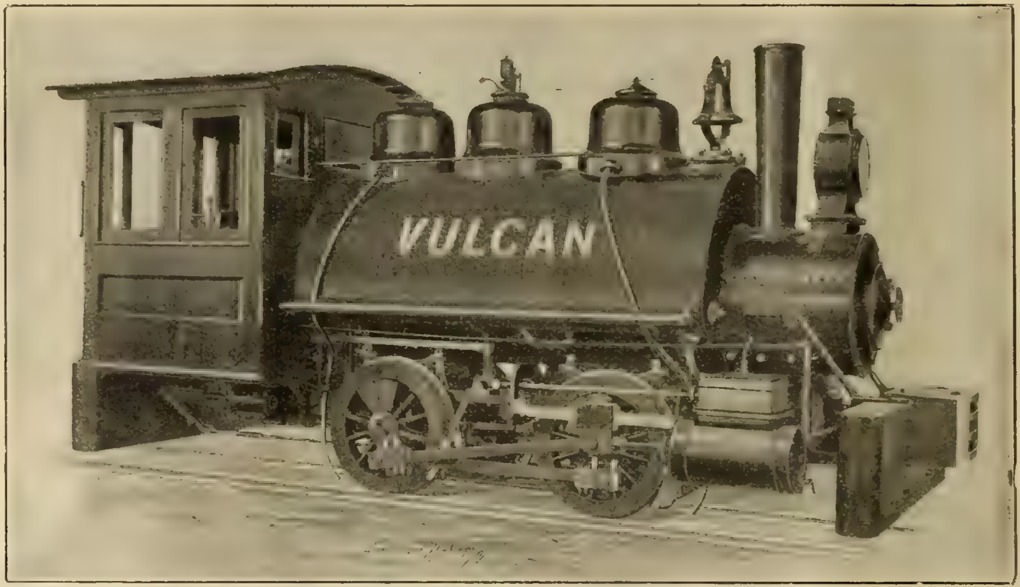

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useful purpose. The cardinal principle of the Railway Act of Canada is to forbid discrimination. Discrimination cannot be avoided where each railway pursues a policy of unrestrained competition regardless of the welfare of the country or of every other carrier. Much assistance has been given by the associations to the Board of Railway Commissioners in their efforts to justly administer the laws. And not only have these associations been thus helpful, but they have been helpful in disseminating among the members information of a practical character, and in exchanging experiences by railway officers from all sections of the country. Some of the most profitable knowledge which the railway officer gains is obtained in the discussions of railway problems at the meetings of these associations. The wiser legislators in the United States are rapidly reaching the conclusion that the laws there should be amended so as to permit this educational work to go on.

A paper of this kind would not appear complete without some further reference to the relations which ought to exist between the public and the railway. It is of the highest importance that friendly relations should always exist between the company and its patrons, because, after all, continued success can only be attained through the public good-will. The railway has transportation for sale, and the public will buy this transportation from that railway from which it receives the greatest amount of consideration in respect of the service, and service includes not only reasonable freight rates, but, what is perhaps more important, expedition in the movement and delivery of goods. The merchant who keeps an attractive store and employs courteous and talented salesmen to display and sell only the very best and most reliable of goods is the one who attracts and keeps customers, and so it is with the railway. Its stations and offices should be kept neat and attractive, its passenger trains equipped with the necessary comforts for travel and kept as punctually as possible on advertised time. Its freight train service should be operated on a schedule, and its employes everywhere should be polite and accommodating. If in any of these things it be deficient, to that extent the service is rendered unattractive to the public and the result is reflected in decreasing earnings. The reputation of a railway company is just as susceptible to damage as that of the merchant, if proper service be not given, and it is just as readily enhanced when the public is pleased. People delight in telling with pride of some remarkable achievement in railway management which has come under their observation, and are just as ready freely to condemn when their reasonable expectations are not realized. There is no other question which engages so much of the public attention to-day as railway transportation. The railway company is ever in the public eye. Every move of the railway is watched and praised or criticized. The officer and employe should, therefore, be ever alert to ascertain the public requirements, and as far as possible comply with them. He should be ready patiently to listen to every complaint, no matter how trivial it may seem, and make an honest effort to comply with the desire of the customer, or explain carefully why it is not possible to do so. The public is exacting and occasionally, perhaps, inclined to be unreasonable, but as a rule it is considerate of the railway company and makes due allowance for unavoidable failures. People do not always understand why the crops of the country cannot be moved to the market within a few weeks of the harvest, or why there should be any shortage of cars in a certain section at a time when the railway is putting forth almost superhuman efforts to take care of the crop of perishable freight before winter weather destroys it. They do not always appreciate that terminals become congested with the enormously increasing traffic, while they themselves have withheld their co-operation by neglecting to increase their own "terminal" facilities at the factory or warehouse. Many merchants to-day are months behind in their orders because they have not increased their manufacturing and shipping and receiving facilities from year to year as their business has expanded. Many order at one time more goods than they can promptly take away from the railway tracks, thus causing serious detention to railway equipment, resulting in yard blockades and a further shortage of cars. The railways spend yearly a large part of their earnings in adding to their engine and car equipment and station and track facilities, and can be depended upon to do their share in preparing to handle the ever-increasing traffic of this rapidly-growing country.

For some time past there has been a growing demand from the public for cheaper and better transportation of both passengers and freight. As to cheaper freight rates, no doubt this demand is born of a desire to recover some of the diminishing profits which result from the demands of labor for increased compensation, and from the higher cost of material and supplies, rather than from any well-founded conviction that rates are in themselves too high for the service rendered. The public, and I fear also the railway commissions, sometimes lose sight of the fact that the great transportation companies equally feel the increased cost of labor and materials, as well as increased taxation, and are not only unable to make a corresponding increase in their freight rates and passenger fares, as every manufacturer or merchant may do in his prices, but are subject to the most serious enforced reductions in both. Is it reasonable or just to expect that the cost of everything else should rise, while at the same time the price of transportation should fall? It is obvious that with the diminishing unit of revenue and increasing expenses, the railways must slowly but surely reach the point when net earnings disappear, when their credit will be seriously impaired, and when they cannot raise in the financial markets of the world sufficient capital to carry on the work of improvement and expansion which the growth of the country requires. If they cannot guarantee investors that their money will yield fair returns, they cannot borrow. If they cannot borrow money they cannot spend, consequently, the country suffers from the unavoidable curtailment of railway expenditures. For every dollar which a railway earns from its traffic it pays back approximately 70c. to its employes for labor, to manufacturers and merchants for supplies, and to the country in taxes. If its rates are reduced by say 20%, it can only earn 80c. where formerly it earned $1. It will, therefore, be able to spend only 56c. where it spent 70c. before. It must reduce its expenses in the same ratio as its earnings are cut down. This would involve possible deterioration in the physical condition of the track, rolling stock and of service and reduction in wages, which would inevitably result in strikes and all sorts of labor troubles. The public, which sells to the railways, will soon find that they are losing rapidly the business of their largest customers. Furthermore, the railways will be prevented from improving, as they wish to do, their transportation facilities, and from increasing their locomotive and car equipment, which the public demands as a necessity to meet the growing requirements of the country. It requires only an ordinary mind to grasp the truth that if the country is to prosper and expand it can only be done when the great carrying companies are permitted to prosper also. The material interests of the country and the material interests of the railways are so closely interwoven that when one suffers the other suffers with it. When one prospers the other prospers also. The lesson to be learned from this may be summed up in the old adage—"Live and let live." Meantime, with the public demanding, and the legislatures enforcing, lower rates on the one hand, and anxious stockholders on the other, the lot of the present day railway administrator is not a happy nor an easy one by any means.

From the foregoing, some idea may be had of the scope of the work and the far-reaching outlook of the freight department, and I repeat that it is the best and most intensely interesting of any of the railway departments. Some railway work may be wearisome and monotonous, because unvaried; not so that of the freight work. One day's work of the freight traffic manager or the general freight agent brings him in touch with all sorts and conditions of men and with traffic questions in all parts of the known world. A day's work may run something as follows: It may be, first, a study of the report of the crop conditions of the coming season, and the question of when and how it is to be moved. Then he may suddenly have to change his point of observation to the orange traffic from California or bananas from South America or the West Indies; fruits and vegetables in their season from the Southern States; teas, silks, and curios from the Orient. A change in the iron market may result in the channels of trade being turned from America to Great Britain or Germany. Directions to subordinates must therefore be given. The paper and pulp mills suddenly find that they can change their markets to advantage, and suitable rate schedules must be arranged at once. Some competitor is reported as getting away with some of his traffic, and immediate steps must be taken to retain it. A caller, who is about to establish a mill, wishes to enlist his interest in getting a siding built the next day without fail. A sudden foreign demand for hay springs up and dealers cannot get cars quick enough—they are at the other end of the line. An ocean steamer is in the harbor awaiting a cargo of grain, which has only just been shipped from Lake Superior. It must be rushed to the seaboard. Some competitor, eager for more traffic, insists on breaking away from fixed schedules, and a sudden call comes to attend a meeting in Toronto, New York, or Chicago to take such steps as may seem advisable. The freight claim agent has an intricate claim, involving not only legal but policy questions, upon which he wishes instructions. The foreign freight agent finds that the competition of the lines via the Gulf of Mexico is preventing him from building up his business. How can he prevent it? The car service agent says that he has demands in a certain section to-day for 2,000 empty cars and has only 200 available; someone must go without and suffer. How shall he distribute the suffering so as to make it fall as lightly as possible? A merchant telephones that his goods ordered last week have not yet been delivered. The tracing staff is set to work. Every few minutes a telegram arrives and everything else must be dropped to prepare an answer. Every train and post mail brings to his desk communications from all parts of the country, some of which may be easy to dispose of, others requiring much consideration. Some are complaints, and some, which it is refreshing to receive, are commendatory, but all take time for perusal and answer. His office door must always be open to the public, whose wants must be attended to before anything else. He must handle his voluminous mail between incessant interruptions. Amid all he must exercise the virtue of patience and self-control. He must always appear to be cheerful and greet his callers with

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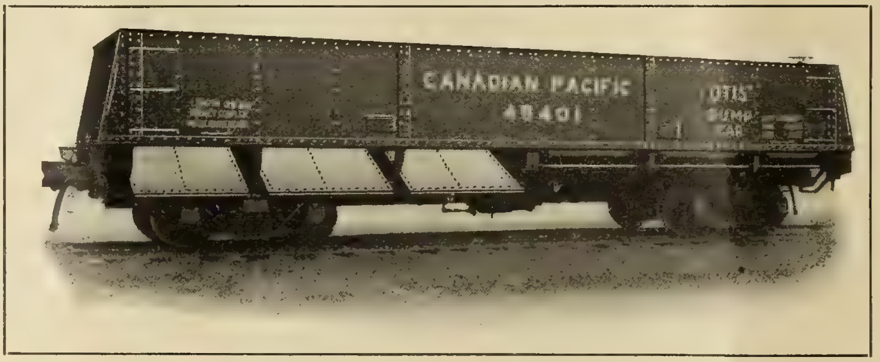

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Successors to Dominion DUMP CAR Company, Limited

a welcome smile no matter how heavily his problems are weighing on him. He must never appear bored or turn anxiously towards other duties when a visitor seems disposed to remain longer than necessary.

The end of the day arrives before he realizes it. He seems to have been busy all day long, but there is still the familiar and apparently never-decreasing accumulation of papers on his desk to start on the next morning. However, he goes home to enjoy a few hours with his family and such refreshing sleep as he can obtain after toil and anxieties such as the public little realizes.

The foregoing paper was read at a meeting of the Canadian Railway Club recently.

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309,900	116,100+
	$3,549,400	$2,452,000	$1,097,400	$ 911,200+

Approximate earnings for Nov., $957,400, against $741,700 for Nov., 1906.

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7,010,177.40	4,439,902.25	2,570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
	$27,512,952.13	$17,604,153.33	$9,908,798.80	$148,350.62−

Approximate earnings for Nov., $6,811,000, against $6,143,000 for Nov., 1906.

Duluth, South Shore and Atlantic Ry.—Gross earnings for Oct., $295,877.29; net earnings, $54,698.00; against $284,448.64 gross and $84,518.59 net, for Oct., 1906. Net earnings for four months ended Oct. 31, $354,205.74, against $424,463.70 for same period 1906. Approximate earnings for Nov., $269,425, against $265,777 for Nov., 1906.

Mineral Range Rd.—Gross earnings for Oct., $73,864.43; net earnings, $10,681.58, against $70,330.78 gross and $25,284.50 net for Oct., 1906. Net earnings for four months ended Oct. 31, $61,242.05 against $85,384.50 for same period 1906. Approximate earnings for Nov., $72,222, against $67,668 for Nov., 1906.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Gross earnings for Oct., $1,420,546.31; net earnings, $712,434.75; against $1,347,853.75 gross and $738,075.78 net for Oct., 1906. Net earnings for four months ended Oct. 31, $1,887,770.27, against $2,510,158.78 for same period 1906. Approximate earnings for Nov., $1,104,517, against $1,111,788 for Nov., 1906.

Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G.T.R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for Oct., as compared with Oct., 1906:

GRAND TRUNK RAILWAY.

	1907	1906
Earnings	$3,177,300	$3,024,500
Expenses	2,254,200	2,086,200
Net earnings	$ 923,100	$ 938,300

CANADA ATLANTIC RAILWAY.

	1907	1906
Earnings	$ 221,100	$ 194,900
Expenses	206,000	175,900
Net earnings	$ 15,100	$ 19,000

GRAND TRUNK WESTERN RAILWAY.

	1907	1906
Earnings	$ 614,100	$ 546,000
Expenses	516,700	455,000
Net earnings	$ 97,400	$ 91,000

DETROIT, GRAND HAVEN & MILWAUKEE RY.

	1907	1906
Earnings	$ 155,900	$ 126,900
Expenses	133,700	107,900
Net earnings	$ 22,200	$ 19,000

Approximate earnings for Nov., $3,934,548, against $3,760,728 for Nov., 1906.

January Birthdays.

Many happy returns of the day to—

G. Bazzard, ex-Freight and Passenger Agent, Delaware, Lackawanna and Western Rd., Toronto, now of Hamilton, Ont., born at Westhide Court, Herefordshire, Eng., Jan. 3, 1838.

A. H. Bears, Master of Bridges and Buildings, C.P.R., Winnipeg, Man., born at Charlottetown, P.E.I., Jan. 6, 1857.

R. H Bell, Commercial Agent, Canadian Northern Ry., Pittsburg, Pa., born at Toronto, Jan. 13, 1865.

G. McL. Brown, General Passenger Agent C.P.R. Atlantic Steamship Line, Montreal, born at Hamilton, Ont., Jan. 29, 1866.

P. W. Brown, Purchasing Agent, Duluth, South Shore and Atlantic Ry., and Mineral Range Rd., Marquette, Mich., born at Uxbridge, Worcester Co., Mass., Jan. 18, 1845.

E. L. Chudleigh, Assistant Superintendent C.P.R., Strathcona, Alta., born at Clinton, Ont., Jan. 3, 1873.

W. A. Cowan, Resident Engineer C.P.R., Toronto, born at Galt, Ont., Jan. 22, 1877.

Sir Sandford Fleming, K.C.M.G., Director C.P.R., born at Kirkcaldy, Scotland, Jan. 7, 1827.

T. A. Foque, Mechanical Superintendent Minneapolis, St. Paul and Sault Ste. Marie Ry., Minneapolis, Minn., born at Boston, Mass., Jan. 14, 1866.

H. V. Harris, ex-General Manager Midland Ry. of Nova Scotia, Truro, N.S., now of Louisville, Ky., born at Devonport, Devonshire, Eng., Jan. 16, 1857.

G. F. Hitchborn, Agent Great Eastern Fast Freight Line, New York City, born at Boston, Mass., Jan. 31, 1875.

Carl Howe, Manager Merchants Despatch and other fast freight lines at Buffalo, N.Y., born at Berrien Springs, Mich., Jan. 11, 1870.

W. J. Hunter, Division Freight Agent G.T. Pacific Ry. and Commercial Agent G.T.R., Winnipeg, born in Toronto, Jan. 10, 1864.

Jas. Kent, Manager C.P.R. Telegraphs, Montreal, born Jan. 15, 1854.

A. Lichtenhein, Galena Signal Oil Co., New York, born there Jan. 15, 1855.

A. J. McGee, Secretary-Treasurer Temiskaming and Northern Ontario Ry. Commission, Toronto, born at Lachine, Que., Jan. 24, 1876.

G. Pepall, Canadian Agent National Despatch, Great Eastern Line, Toronto, born at High Wycombe, Buckinghamshire, Eng., Jan. 15, 1849.

W. Phillips, General Eastern Agent Canadian Northern Ry., and General Freight and Passenger Agent, Canadian Northern Ontario Ry., Toronto, born at Toronto, Jan. 31, 1870.

J. Pullen, Assistant Freight Traffic Manager, G.T.R., Montreal, born at Shepton Mallet, Somersetshire, Eng., Jan. 23 1863.

S. L. Shannon, Comptroller and Treasurer Intercolonial Ry., Moncton, N.B., born at Halifax, N.S., Jan. 18, 1862.

S. J. Sharp, Western Passenger Agent C.P.R. Atlantic Steamship Line, Toronto, born at London, Ont., Jan. 21, 1860.

J. R. Steele, Freight Claims Auditor C.P.R., Montreal, born at St. John's, Newfoundland, Jan. 14, 1856.

W. A. Trueman, Director, Secretary and Treasurer Albert Southern Ry., Albert, N.B., born at Wallace, N.S., Jan. 29, 1849.

S. G. Wagstaff, Commercial Agent G.T.R., Toledo, Ohio, born at Hamilton, Ont., Jan. 6, 1866.

F. J. Watson, Division Freight Agent G.T.R., Montreal, born at Toronto, Jan. 12, 1866.

G. H. Webster, C.E., President British Columbia Contract Co., Vancouver, B.C., born at Creemore, Ont., Jan. 31, 1858.

T. H. White, Chief Engineer of Construction, Mackenzie, Mann & Co.'s lines east of Port Arthur, Ont., Toronto, born at St. Thomas, Ont., Jan. 27, 1848.

A Canadian Northern Ry. Lake Port.

One of the most interesting features in connection with the development of the Canadian Northern Ry. as a transcontinental line, is the opening up of a new port on the Georgian Bay, as the southern terminus on the Upper Lakes. The C.P.R. developed Owen Sound, and is taking steps to take advantage of the facilities of Victoria Harbor, by the construction of the Georgian Bay and Seaboard Ry., to join the Toronto-Montreal line near Peterborough, while the G.T.R. touching at a number of points has, as its own particular ports, Midland and Depot Harbor. Having made a thorough examination of the facilities of the various ports, and of the country through which the connecting lines of railway would have to run, the Canadian Northern Ry. Co. decided to select and develop an entirely new port. After considerable expenditure of time Key Harbor, on the north shore of Key Inlet, at the mouth of the French River, Georgian Bay, was selected. The new port is considerably north of Parry Sound, and from its situation near the point at which the projected Georgian Bay-Montreal ship canal would debouch into the Upper Lakes, would be an important point in connection with that enterprise. It is situated about six miles from the company's Toronto-Sudbury line, about 200 miles north of Toronto, and about 500 miles by the lake route from Port Arthur. A branch line to connect the railway with the docks is nearly completed. It starts from the main line about three miles south of French River, and terminates at the docks. The point of junction with the Toronto-Sudbury line will be the point at which the company's Ottawa line will come in, thus connecting up the port with the Canadian Northern Quebec Ry., as well as with the Canadian Northern Ontario Ry. Pending the construction of the line from Sudbury to Port Arthur, the lake route from Key Harbor to Port Arthur will form the connection with the Canadian Northern Ry.

The railway at Key Harbor ends in a trestle, about a mile long, which is to be constructed during the winter. On this trestle, trainloads of ore will be elevated so that their contents may be dumped into pockets and transferred to a rubber belt conveyer running through a tunnel cut out of the rock, and then elevated on another belt to a trestle 60 ft. above water level, where it will be held ready to be shot into the steamers lying alongside. The capacity of the dock plant will be 8,000 tons per day of 10 hours. The power-house is almost finished. Coal docks will also be built, and the transhipment of mineral alone should make Key Harbor a port of considerable importance. The iron ore, which will be the principal shipment from the port when it is opened in the spring, will be brought from the Moose Mountain mines, about 30 miles north of Sudbury, to which point the company's line is practically completed. The mines are already well developed, and large quantities of ore are being piled up ready for shipment. The mines are situated about the same distance from navigable water as the iron ranges back of Duluth, Minn., but are 500 miles nearer coal. This, with the high percentage of iron in the ore, will give the output of the Moose Mountain mines a favorable position on the markets. At the dockside at Key Harbor there is 24 ft. of water—more than sufficient to carry the largest boats on the lakes. The draught of the Sault Ste. Marie Canal and the St. Clair River is only 20 ft. 6 in. Key Harbor will markedly affect business with Port Arthur. The biggest vessels will be able to take wheat to Key Harbor from Port Arthur; carry ore to Cleveland, and load coal there for Port Arthur and the west.

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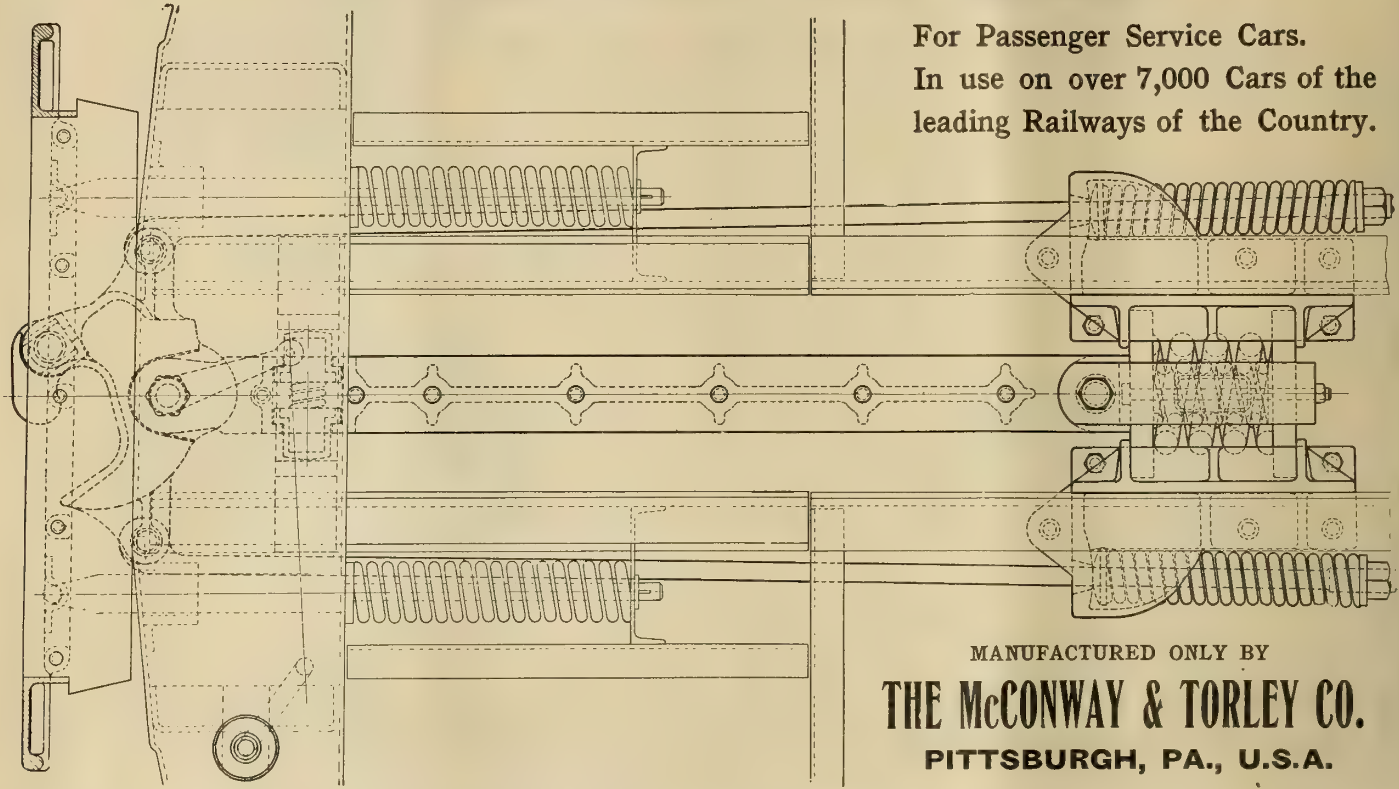

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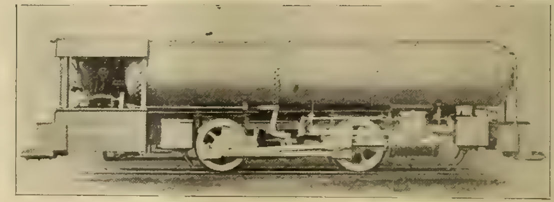

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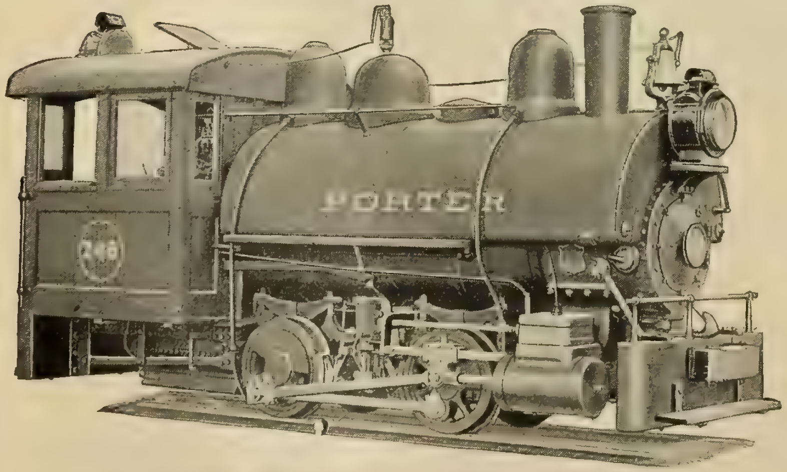

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The Dominion Government steamboat Bayfield has completed the survey work for the harbor and its approaches. The entrance from Georgian Bay will be quite simple, only four ranges for the guidance of vessels being necessary, the last running straight into the dock. The buoys and lights are ready to be placed in position. The whole of the construction of the docks is in charge of R. M. Pratt, who was in charge of the construction of the grain elevators and coal docks at Port Arthur for the company.

Canadian Northern Terminals at Quebec.

The recent acquisition by the Canadian Northern Ry. interests of the control of Quebec and Lake St. John Ry. stock puts the C.N.R. in possession of the best and largest terminals in the city of Quebec, and of a system of docks and deep water shipping facilities which could not be duplicated without an enormous expenditure of money. The terminal property is situated in the heart of the city, near to the Chateau Frontenac, and to the residential quarter, and at the same time in proximity to the banks, wholesale houses, grain elevators and docks of the commercial section. It extends from the gas works on the River St. Charles towards the Custom House on the St. Lawrence River front, contains an area of 370,000 ft. of the most valuable property in the centre of the business portion of the city, and has a frontage of over 1,200 ft. on the Princess Louise Dock. A deep water wharf with a depth of 29 ft. at low tide covers a portion of this frontage, so that the largest ocean steamers load and unload cargoes opposite to the railway station. The rails for the eastern section of the National Transcontinental Ry. are unloaded at this dock and thence forwarded by rail to La Tuque, Hervey Jct., and other points where tracklaying is in progress. The rest of the frontage of the property is covered by a new wharf which gives accommodation to propellers from the Upper Lakes, and to a great fleet of canal boats which carry pulpwood and sawn lumber to the United States. Tracks lead from the terminal property to all points on the Louise docks, the C.P.R. Empress steamers' docks, the Quebec Terminal Co.'s grain elevator, and to the Canadian Northern million bushel elevator adjoining the Custom House. On the north side of the River St. Charles, at Limoilou Jct., the company owns, within a few hundred feet of its city terminus, 53 acres of very valuable level ground, which it is intended to utilize for machine shops, car works, shunting grounds, car storage and the live stock trade. At the western end of this ground the Canadian Northern Quebec Ry.'s new line, which will be the shortest route between Quebec and Montreal, diverges, and running west reaches Cap Rouge and the northern approach to the cantilever bridge under construction across the St. Lawrence, and passing under the G.T. Pacific Ry., continues from Cap Rouge westward to Grand Mere, Shawinigan, Joliette and Montreal.

CANADIAN NORTHERN QUEBEC RAILWAY TERMINALS AT QUEBEC.

Quebec and Lake St. John Ry.

The official opening of the La Tuque branch took place Nov. 30, when a special train carried a party of directors, officers, members of Parliament and business men from Quebec to the St. Maurice River Falls at La Tuque. The branch leaves the main line at La Tuque Jct., at mileage 78, a little north of Miguick station on the Batiscan River, and runs to La Tuque, the head of navigation of the St. Maurice River, 40 miles. The line crosses the Batiscan River, and runs up the Jeannotte River, one of its tributaries, thence crossing to Lake Wayagamack, and follows the discharge of that lake to the St. Maurice River at La Tuque. At the point of departure from the main line the elevation above tide water is 890 ft., the elevation of the summit is 1,186 ft., and at the terminus the height is 560 ft. The line has been constructed in a most substantial manner, the embankments being 16 ft. wide and the cuttings 22 ft., the steel bridges being built to the highest Dominion Government specifications. The maximum gradient going west is 1%, and coming east 1.25%, while the sharpest curve is 80°. The quantity of rock excavation was approximately 370,000 cubic yards, and the earth excavation approximately 1,200,000 cubic yards. The line is heavily ballasted throughout. A commodious station and freight sheds have been built at La Tuque; way stations and section houses at four other points, while three large locomotive water tanks of 40,000 galls. capacity each have been erected. The contractor was Joseph Paquet, Levis, Que., who sublet a portion to O'Brien and Fowler; the steel bridges were constructed by the Dominion Bridge Co., Lachine, Que. A. E. Doucet, Chief Engineer of the company, had general charge of construction, M. Jacquemart being resident engineer.

G. Lemoine, Vice-President of the company, occupied the chair at the public dinner with which the opening was celebrated, and referred to the absence of the President, D. B. Hanna, which was occasioned by that gentleman desiring to leave the proceedings in the hands of the old directors, who had planned and arranged for the construction of the branch. The toast list included the Provincial Government, by which the company had been liberally aided, the Q. and L. St. J. Ry. officers and directors, the Chief Engineer, the contractor, the Canadian Northern Ry. Co., which now controls the Q. & L. St. J. Ry., and the Quebec and St. Maurice Industrial Co., which is developing the resources of the district through which the branch passes.

The St. Maurice River is navigable from La Tuque southward to Grand Piles, about 70 miles; but from that point to Three Rivers, where the St. Lawrence is reached, the river is broken up by numerous rapids and falls, making navigation impossible. Several steamboats at present trade on the river, but it is intended to put on some larger ones and to develop the tourist business. The La Tuque Falls are 90 ft. high, and it is estimated that from 90,000 to 100,000 h.p. can be developed by their utilization. The Quebec and St. Maurice Industrial Co. has been formed to develop the power, and has entered into a contract with the Provincial Government to expend $500,000 upon the work within three years. A pulpwood industry has already been started and a contract has been entered into by which the railway is to receive 4,000 carloads of freight annually at La Tuque, for nine years. The construction of the Eastern Division of the Transcontinental Ry., east and west from La Tuque, is providing considerable freight, and will do so for another couple of years. (Nov., 1907, pg. 831.)

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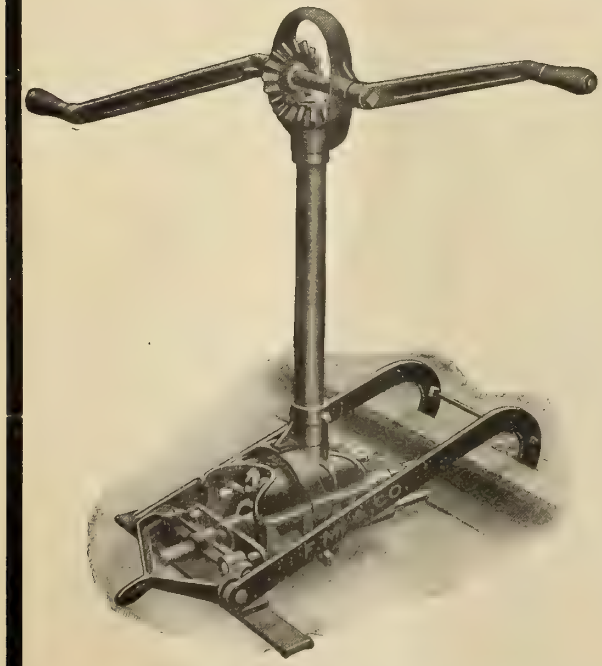

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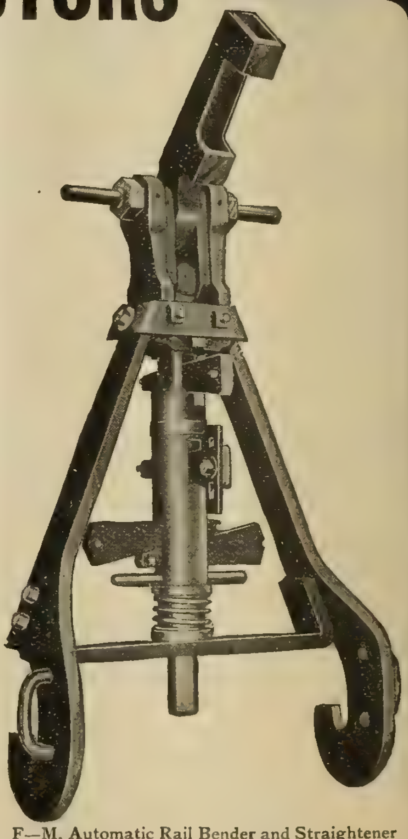

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THE CANADIAN FAIRBANKS CO., LIMITED

MONTREAL TORONTO WINNIPEG VANCOUVER

Orders by the Railway Commissioners.

3916. Nov. 12—Authorizing the C.P.R. to construct a branch line along the north bank of the Lachine Canal to the Simplex Railway Appliance Co.'s premises, Lachine parish, Que.

3917. Oct. 30—Authorizing the City of Hamilton, Ont., to construct a sewer under T. H. & B. R. tracks.

3918. Nov. 12—Authorizing G.T.R. to construct a spur to J. Gow's premises, Fergus, Ont.

3919. Oct. 30—Authorizing the City of Hamilton to construct Trolley St. across the T.H. & B.R. spur line tracks at rail level.

3920. Nov. 14—Approving the Quebec, Montreal and Southern Ry.'s location from its junction with the G.T.R. to a connection with the Napierville Jct. Ry. near St. Constant, Que.

3921. Nov. 15—Authorizing C.P.R. to take a lot in Renfrew, Ont.

3922. Nov. 16—Extending to Nov. 25, 1907, the time in the order granting the Can. Nor. Ont. Ry. permission to cross C.P.R. tracks near Wahnapitae station, Ont.

3923. Nov. 15—Approving revised location of Can. Nor. Ont. Ry. through tps. 17, ranges 17, 18 and 19, west 2nd mer., mileage 183.1 to 198.6, Sask.

3924. Nov. 15—Authorizing Algoma Central and Hudson Bay Ry. to build a bridge over south branch of Chippewa River.

3925. Nov. 13—Requiring that the freight tariffs of tolls referred to in order 3258, dated July 6, 1907, come into force from points in Canada not later than Jan. 1, 1908. (See Dec. issue, pg. 907).

3926. Nov. 14—Authorizing Quebec, Montreal and Southern Ry. to cross and connect with the Lotbiniere and Megantic Ry. near St. Philomene, Que

3927. Nov. 15—Authorizing G.T. Pacific Ry. to construct bridge over Assiniboine River east of Portage la Prairie, Man.

3928. Nov. 14—Authorizing Can. Nor. Que. Ry. to open for traffic the portion of its line from the Gt. Northern Ry. near St. Jerome, Que., to a junction with the Montford division near St. Sauveur, 15.2 miles.

3929. Oct. 16—Prohibiting the use of combination car 4 and passenger car 1 upon the New Brunswick Southern Ry.; and ordering that van 99 be not used until fitted with automatic couplers.

3930. Nov. 14—Authorizing Bell Telephone Co. to place its wires across C.P.R. tracks at Kildonan Ave., Winnipeg.

3931. Nov. 15—Authorizing Q.M. & S. Ry. to divert the highway at station 1762+37, and to carry its line across Notre Dame St., Nicolet, Que.

3932. Nov. 4—Granting the C.P.R.'s application to recommend to the Governor-in-Council the sanction of a lease of the Joliette & Brandon Ry. to the C.P.R., and recommending the lease to the Governor-in-Council for sanction.

3933. Nov. 18—Authorizing the Town of Lachine, Que., to lay a drain and sewer under G.T.R. tracks.

3934. Nov. 15—Authorizing C.P.R. to construct spurs to the Mount Royal Spinning Co.'s premises, Montreal.

3935. Nov. 16—Authorizing C.P.R. to construct bridge over Coldwater River, mileage 11.5, Georgian Bay and Seaboard Ry.

3936. Nov. 16—Authorizing C.P.R. to construct a spur through W. F. Vilas's property, Dunham tp., Que.

3937. Nov. 18—Authorizing C.P.R. to construct bridge over the Sturgeon River, mileage 6, Georgian Bay and Seaboard Ry.

3938. Nov. 18—Authorizing C.P.R. to construct bridge at third crossing of Sawga River, on its Nonoming extension.

3939. Nov. 19—Authorizing Bell Telephone Co. to place its wires across the Can. Nor. Ry. at Dacotah siding, Man.

3940. Nov. 19—Approving revised location of Can. Nor. Ry. through secs. 2, 3 and 10, tp. 21, r. 28, w.p.m., and through Russell, Man.

3941. Nov. 12—Approving 64 highway crossings of G.T. Pacific Ry. from sec. 18, tp. 17 north, r. 28, west 1st mer., to sec. 34, tp. 21 north, r. 4, west 2nd mer., districts of Shoal Lake and Assiniboia.

3942. Oct. 4—Approving location of 7 stations of G.T. Pacific Ry. in Manitoba, mileage 0 to 62.82.

3943. Nov. 18—Authorizing Dunnville Consolidated Telephone Co. to place its wires across M.C.R. tracks at Moulton station, Ont.

3944. Nov. 18—Authorizing C.P.R. to construct a spur from its Phœnix branch near Eholt, B.C.

3945. Nov. 18—Authorizing City of Toronto to lay waterpipes under G.T.R. tracks on Queen St. East.

3946. Nov. 18—Authorizing C.P.R. to reconstruct Marion St. subway, Parry Sound, Ont.

3947. Oct. 26—Forbidding Salisbury & Harvey Ry. to use the ordinary railway box car or cars heretofore used by it for the carriage of baggage.

3948. Nov. 18—Authorizing the Town of Simcoe to lay water mains under G.T.R. tracks.

3949. Nov. 25—Authorizing G.T.R. to reconstruct bridge near Belœil, Que.

3950. Nov. 16—Authorizing C.P.R. to construct two branch lines on the n.e. ¼ of sec. 25, tp. 24, r. 9, west of the 5th mer.

3951. Nov. 21—Ordering G.T.R. to change its tariff C.R.C. E-425 so that the tolls to be charged upon the class of paper covered by that tariff for carriage from Merritton, St. Catharines or Thorold to Montreal shall not be greater than the rates charged from Brantford to Montreal; that in any future change of tariffs upon such paper, the rates from Merritton, St. Catharines and Thorold to Montreal shall not be greater than those from Brantford to Montreal; and that the new rates provided in this order shall come into force not later than Nov. 28, 1907.

3952. Nov. 21—Authorizing C.P.R. to construct a spur to Merrick, Anderson & Co.'s premises, Winnipeg.

3953. Nov. 20—Authorizing Winnipeg Elec. Ry. to cross the C.P.R. spur leading from the Griffin Pork Packing Co., Elmwood, Winnipeg.

3954. Nov. 20—Authorizing G.T. Pacific Ry. temporarily to connect its track with the Can. Nor. Ry. track east of Portage la Prairie, Man.

3955. Nov. 21—Authorizing the Town of Waterloo, Ont., to lay sewerage pipes under G.T.R. tracks.

3956. Nov. 21—Authorizing C.P.R. to construct a spur to the Calgary Gas Co.'s premises, Calgary, Alta.

3957. Nov. 21—Authorizing W. G. Tretheway of Weston, Ont., to lay a waterpipe under G.T.R. tracks in York, tp. Ont.

3958. Nov. 21—Authorizing Erie Telephone Co. to place its wires across G.T.R. tracks at Hagersville, Ont.

3961. Nov. 22—Authorizing Can. Nor. Ont. Ry. Co. to operate its trains on the C.P.R. tracks, near Wahnapitae station, Ont.

3959. Nov. 14—Authorizing Consumers' Gas Co. to lay a main under G.T.R. tracks at Logan Ave., Toronto.

3960. Nov. 21—Authorizing C.P.R. Co. to construct a spur from a point to the J. I. Case Threshing Machine Co.'s premises, Calgary, Alta.

3962. Nov. 19—Authorizing Bell Telephone Co. to place its wires across the M.C.R. tracks near Southwold station, Ont.

3963. Nov. 18—Authorizing C.P.R. to construct a spur in Lethbridge, Alta.

3964. Nov. 19—Approving Hamilton Radial Electric Railway Co.'s by-laws.

3965. Nov. 18—Authorizing C.P.R. to open for traffic that portion of the double track of its main line between Ft. William and Winnipeg, viz., mileage 133 to 142, Ignace section, and mileage 0 to 3, Fort William section.

3966. Nov. 19—Approving Brantford & Hamilton Electric Ry. Co.'s by-laws.

3967. Nov. 12—Authorizing C.P.R. to make connection between its line and the G.T.R. at Galt, Ont.

3968. Nov. 13—Extending till Jan. 1, 1908, the time for the installation of derailing and interlocking plant where the G. T. Pacific Ry. crosses the C.P.R. in sec. 1, tp. 12, r. 11, w. 1st mer., Manitoba.

3969. Nov. 15—Authorizing the C.P.R. and G.T.R. to construct a highway across their respective lines at the east end of Dennison Ave., Weston, Ont.

3970. Nov. 19—Authorizing Brantford and Hamilton Elec. Ry. to construct its line across stone road, Ancaster, Ont.

3971. Nov. 21—Authorizing C.P.R. to construct two spurs on the s.e. ¼ sec. 36, tp. 7, r. 3, w. of 5th mer., Alberta, owned by Canadian Metal Co.

3972. Nov. 23—Amending order 3334, dated July 23, 1907, authorizing the Water, Light and Tel. Commissioners of Ft. William, Ont., to erect a temporary pole line across C.P.R. tracks.

3973. Nov. 23—Authorizing Can. Nor. Que. Ry. to connect its track with the Quebec and Lake St. John Ry. track at Hedleyville, Que.

3974. Nov. 23—Authorizing Can. Nor. Ont. Ry. Co. to place its telegraph wires across the C.P.R. Sudbury-Kleinburg branch tracks near Elbow Creek.

3975. Nov. 25—Authorizing C.P.R. to open for traffic the portion of its Pheasant Hills branch from Nokomis to Lanigan, mileage 125.5 to 148.7.

3976. Nov. 22—Approving Central Ontario Ry. local standard passenger tariff C.R.C. 172.

3977. Oct. 30—Authorizing G.T.R. to construct an additional track on Ferguson Ave., Hamilton, Ont., crossing Barton St., and the Hamilton St. Ry. tracks, to the G.T.R. Co.'s property north of Murray St.; together with two spurs therefrom.

3978. Oct. 30—Dismissing application of E. Vanallen, of Hamilton, Ont., for an order rescinding order 635, dated Sept. 1, 1905, authorizing the Hamilton, Galt and Guelph Ry. Co. to operate its railway along certain streets.

3979. Nov. 19—Authorizing townships of Neelon and Garson, Ont., to construct a highway across C.P.R. tracks.

3980. Nov. 14—Authorizing Consumers' Gas Co. to lay a pipe under G.T.R. tracks at Eastern Ave., Toronto.

3981. Nov. 22—Temporarily approving shipping receipts, contracts, etc., of United States and Northern Express Cos., until Mar. 1, 1908.

3982. Nov. 25—Authorizing London Tp. Telephone Co. to place wires across G.T.R. tracks at Ilderton, Ont.

3983. Oct. 30—Dismissing application of E. Vanallen of Hamilton, Ont., for an order

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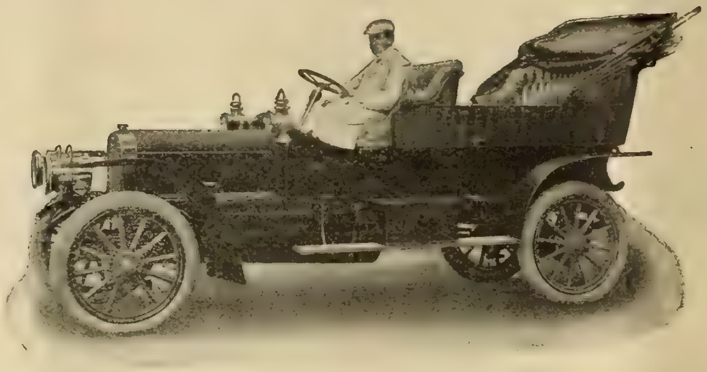

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rescinding order 631 of Sept. 1, 1905, authorizing Brantford and Hamilton Elec. Ry. Co. to operate its railway along certain streets in Hamilton.

3984. Nov. 19—Approving supplement 11 to C.P.R. local standard passenger tariff C.R.C. W-8, providing for a rate of 3c. per mile between Nokomis and Lanigan, Sask.

3985. Nov. 22—Temporarily approving shipping receipts, contracts, etc., of National and American Express Cos., until Mar. 1, 1908.

3986. Oct. 15—Authorizing James Bay Ry. to construct its line across certain public roads in the Georgina tps, Ont., mileage 48.75 to 57.64 from Toronto north.

3987. Oct. 29—Amending order 2508, of Oct. 13, 1904, granting leave to London St. Ry. to cross the London and Port Stanley Ry. at South St., London, Ont.

3988. Nov. 22—Authorizing the V.V. and E. Ry. to take more ample space through portion of the s.e. ¼ sec. 10, and the n.e. ¼ sec. 3, tp. 16, New Westminster District, B.C., on its branch from Abbotsford to Huntingdon.

3989. Oct. 30—Amending order 3149 of June 11, 1907, approving location of Brantford and Hamilton Elec. Ry. from the east limit of Brantford to the east side of Murray St.

3990. Nov. 26—Authorizing Pere Marquette Ry. to operate its trains on its tracks crossing the W.E. and L.S.R. Ry. tracks at Pelton, Ont.

3991. Nov. 26—Approving location of B.C. Southern Ry. branch line from mileage 0, on its main line, about 2 miles n.w. from Michel station, B.C., thence n.w. and n.e. for 1.7 miles.

3992. Nov. 26—Authorizing C.P.R. Co. to construct a spur to R. C. Thomas' premises, Calgary, Alta.

3993. Nov. 26—Approving location of Esquimalt and Nanaimo Ry. from Wellington, B.C., at mileage 77.5 from Victoria, to mileage 87.5.

3994. Nov. 26—Authorizing West Garafraxa Telephone Co-operative Assn. to place wires across the C.P.R. Elora branch.

3995. Nov. 26—Authorizing C.P.R. to construct a spur to W. F. Lee's premises Winnipeg.

3996. Nov. 26—Authorizing Can. Nor. Ont. Ry. to construct its line across certain public roads in Neelon and Garson tps., Ont.

3997. Nov. 26—Approving location of C.P.R. from its Pheasant Hills branch, sec. 2, tp. 29, r. 28, west of 3rd mer., to its Moose Jaw branch in sec. 14, tp. 33, r. 22, west of 3rd mer.

3998. Nov. 26—Authorizing C.P.R. to construct a bridge over a highway crossing its tracks on proposed deviation of the line over the St. John River, N.B.

3999 to 4001. Nov. 26—Authorizing Bell Telephone Co. to place wires across G.T.R. tracks near Morrisburg station, Ont., and at Grand Ligne, Que., and across C.P.R. tracks near Campbell's Bay station, Que.

4002. Oct. 30—Authorizing Guelph and Goderich Ry. to take possession of certain G.T.R. lands in Goderich, Ont.

4003. Nov. 28—Authorizing Walkerton & Lucknow Ry. to cross G.T.R. track by an overhead timber trestle, near Hanover, Ont.

4004, 4005. Nov. 27—Authorizing Can. Nor. Que. Ry. to construct a bridge over Portneuf and Jacques Cartier Rivers, Que.

4006. Nov. 26—Authorizing G.T.R. to construct a branch line in Meaford, Ont.

4007. Nov. 26—Approving revised location of G.T. Pacific Ry. through unsurveyed territory, mileage 90 to 128.837, from Rocky River to Yellowhead Pass, Alta.

4008. Nov. 26—Authorizing C.P.R. to construct its Sudbury-Kleinburg branch across streets in Parry Sound, Ont.

4009. Nov. 12—Authorizing G.T.R. to operate its trains on its track crossing the C.P.R. track in Yarmouth tp., Ont.

4010. Nov. 30—Authorizing Can. Nor. Ont. Ry. to connect its track with the line of the C.P.R. track in Sudbury, Ont.

4011. Nov. 28—Authorizing C.P.R. to construct spurs from the Middlesboro Colliery Co. and the Diamond Vale Colliery Co., in Yale district, B.C.

4012. Nov. 27—Directing A. F. Dillinger, Operating Assistant to Chief Traffic Officer, to inquire into the Independent Lumber Co.'s complaint regarding demurrage charged by C.P.R.

4013. Nov. 15—Authorizing G.T.R. to construct a spur to the People's Specialty Co.'s premises, Grand Ligne, Que.

4014, 4015. Nov. 20—Authorizing the C.P.R. to build its track across highways in Elma and Mornington tps., Ont.

4016. May 5—Authorizing that Dougall Road be carried under the Canada Southern Ry. main line near Windsor, Ont., by a subway; and that the C.S.R. cross the road with two side tracks by subways, where the main line crosses the road.

4017. Nov. 28—Authorizing Bell Telephone Co. to place its wires across G.T.R. tracks at Canfield station, Ont.

4018 to 4024. Nov. 16—Authorizing G.T. Pacific Ry. to build its railway across highways in the Province of Saskatchewan.

4025. Oct. 21—Authorizing the G.T. Pacific Ry. to build its line across the highways in Brandon, Neepawa, and Shoal Lake districts, Man.

4026. Nov. 15—Authorizing G.T. Pacific Ry. to build its line across highways in the Province of Saskatchewan.

4027. Dec. 3—Authorizing G.T. Pacific Ry. to construct a bridge over Assiniboine River near St. Lazare, Man.

4028. Nov. 30—Authorizing C.P.R. to build a spur to the Sudbury Brewing & Malting Co.'s premises, Sudbury, Ont.

4029. Nov. 29 — Approving Canadian Northern Express Co.'s by-law appointing Scott Griffin, or such other officer as he may designate, to prepare and issue tariffs of tolls.

4030. Nov. 30—Authorizing C.P.R. to build a spur to T. A. Lytle & Co.'s premises, Toronto.

4031. Nov. 30—Authorizing C.P.R. to build a spur line on the Watson Mfg. Co.'s premises, Toronto.

4032. Dec. 3—Authorizing N. Watson, Mull, Ont., to place telephone wires across the M.C.R. tracks near Mull station, Ont.

4033. Nov. 30—Authorizing Bell Telephone Co. to place its wires across G.T.R. tracks near Delhi station, Ont.

4034. Dec. 3—Authorizing Gananoque Bolt Co. to lay a water main under the Thousand Island Ry. tracks at Gananoque, Ont.

4035. Nov. 30—Authorizing the Town of Lindsay, Ont., to lay a sewer pipe under G.T.R. track.

4036. Nov. 12—Directing A. F. Dillinger, Operating Assistant to Chief Traffic Officer, to make inquiry into the Dominion Millers' Association complaint, that the C.P.R. unjustly discriminates in the methods of dealing with shipments of grain and flour from Ft. William and Owen Sound, Ont., against the millers in the east.

4037 to 4039. Dec. 4—Authorizing Walkerton & Lucknow Ry. to build its railway across public roads in Bentinck tp., Ont.

4040. Dec. 4—Authorizing C.P.R. to construct several spurs to the City of Toronto's premises, to the City asphalt plant, and to the Alexander Brown Milling Co.'s premises, Toronto.

4041. Dec. 4—Authorizing C.P.R. to construct a spur in Port Moody, B.C.

4042. Dec. 4—Authorizing C.P.R. to open for traffic the portions of its main line second track between Ft. William and Winnipeg, from Dryden, mileage 63.5 to 71; and from Ingolf, mileage 31.2 to Dagero, mileage 39.5.

4043. Dec. 4—Authorizing Atlantic & Northwestern Ry. to open for traffic the deviation of its main line at Magog, Que.

4044. Dec. 3—Authorizing T.H. & B. Ry. to build a spur line to the Banwell-Hoxie Wire Co.'s premises, Hamilton, Ont.

4045. Dec. 4—Authorizing Can. Nor. Ry. to open for freight traffic the portion of its Brandon-Regina branch from mileage 0 to 206.

4046. Dec. 4—Approving location of C.P.R. from 20 miles northwesterly from Nominingue, to 36 miles northwesterly from Nominingue, at Rapide de L'Orignal, Que.

4047, 4048. Dec. 4—Authorizing Bell Telephone Co. to place its wires across M.C.R. tracks.

4049 to 4055. Dec. 5—Authorizing Bell Telephone Co. to place its wires across C.P.R. tracks at different points.

4056. Dec. 4—Rescinding order 3177, of June 14, and authorizing Bell Telephone Co. to place its wires across C.P.R. tracks in Woodstock, Ont.

4057. Aug. 15—Authorizing Chief Commissioner to examine upon oath any witness who may be produced to give evidence material to the Portage la Prairie Board of Trade's application for an order disallowing the C.P.R. special freight tariffs W-1000, C.R.C. W-644 and W-1006, C.R.C. W-652, as being illegal.

4058. Nov. 5—Amending order 3877, of Nov. 11, dismissing application of Town of Claresholm, Alta, for an order directing the C.P.R. to construct a highway crossing in said town.

4059. Oct. 29—Authorizing that the Little Creek drain be carried across the G.T.R. right-of-way and under its track in Rochester tp., Ont.

4060. Nov. 26—Authorizing the Town of Brampton, Ont., to lay a sewer pipe under G.T.R. tracks.

4061. Nov. 26—Authorizing Town of Brampton, Ont., to lay a sewer pipe under C.P.R. tracks.

4062. Nov. 4—Ordering G.T.R. to reduce its rate from Rouse's Point to Coteau Jct. and St. Polycarpe, on its Canada Atlantic branch, to 80c. per gross ton on anthracite coal, and 70c. per gross ton on bituminous coal, said rates to become effective not later than Feb. 1, 1908.

4063. Aug. 6—Authorizing V.W. & Y. Ry to carry its track across the B.C. Elec. Ry. track at Westminster Ave., Vancouver, B.C.

4064. Dec. 6—Authorizing C.P.R. Co. to construct a subway crossing under its track at First St., West, Calgary, Alta.

4065, 4066. Dec. 5—Authorizing Bell Telephone Co. to place its wires across Can. Nor. Que. Ry. tracks.

4067. Nov. 27—Amending order 3083, of May 20, directing Lake Erie & Detroit River Ry. to instal and maintain an interlocking plant where its track crosses the G.T.R. in Chatham, Ont.

4068. Nov. 19—Authorizing the G.T. Pacific Ry. to construct its railway under the highway between sections 12 and 13, tp. 52-53, west of the 4th p. m., Alberta.

4069. Nov. 19—Authorizing G.T. Pacific Ry. to construct and maintain an overhead crossing where its railway crosses the highway between sections 10 and 11, in tp. 12, r. 17, w.p.m., Manitoba.

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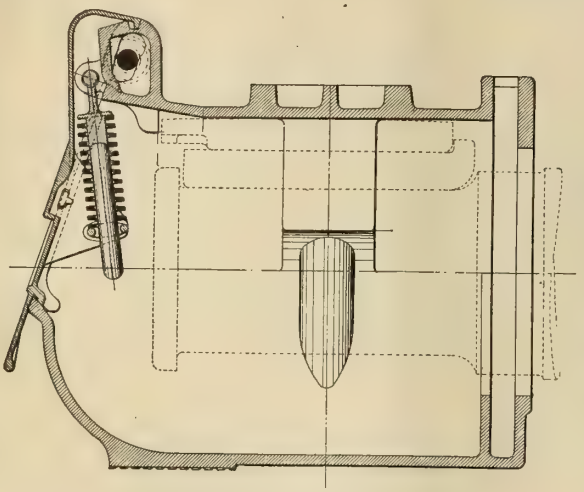

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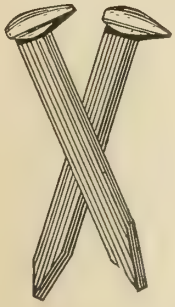

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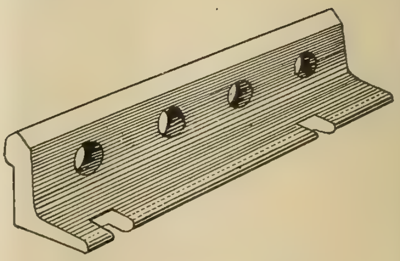

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4070. Dec. 3—Authorizing Q.M. & S. Ry. to cross at rail level highways in the Parish of Ste. Sophie de Levrard, and to divert highway in Parish of St. Pierre les Becquets, Que.

4071. Dec. 4—Amending order 3850, of Oct. 21, authorizing the Toronto and Niagara Power Co. to place its wires across certain railway tracks.

4072. Dec. 2—Authorizing Q.M. & S. Ry. to cross highways in St. Pierre les Becquets parish, Que.

4073. Dec. 6—Authorizing G.T. Pacific Ry. to operate trains on its track crossing the Can. Nor. Ry. Carberry branch, without being brought to a stop.

4074, 4075. Dec. 6—Authorizing G.T. Pacific Ry. to operate trains on track crossing the C.P.R. Brookdale and Miniota branches without being brought to a stop.

4076. Dec. 6—Authorizing Erie Telephone Co. to place its wires across M.C.R tracks in Hagersville, Ont.

4077. Dec. 10—Authorizing the Manitoba Department of Railways, Telephones and Telegraphs to place its wires under the Winnipeg Transfer Ry. tracks on Notre Dame St., Winnipeg.

4078. Dec. 10—Authorizing Bell Telephone Co. to place its wires across C.P.R. tracks near Magog, Que.

4079. Nov. 29—Dismissing application of A. K. S. McA. Robertson, of London, Eng., for an order rescinding order 3272, of July 15, 1907, which authorized the Chatham, Wallaceburg & Lake Erie Ry. to construct its railways along Queen St., Chatham, Ont.

4080. Dec. 10—Authorizing G.T.R. to instal gates at its crossing with the Montreal Street Ry. at junction of St. Ferdinand and Notre Dame Sts., St. Henri Montreal.

4081. Nov. 19—Authorizing Manitoba Department of Railways, Telephones and Telegraphs to place its wires under Winnipeg Transfer Ry. tracks, at corner of Higgins and May Sts., Winnipeg.

4082, 4083. Dec. 12—Sanctioning closing of part of Harbour Lane, Goderich, Ont., north of Harbour St., and opening an extension of Water Lane in substitution of the part of Harbour Lane so closed; also sanctioning closing of parts of Ship Terrace, Water Lane, Beach St., and Harbour Lane, lying south of Harbour St.

4084. Dec. 12—Approving Michigan Central Railroad standard passenger tariff C.R.C. 750.

4085. Dec. 12—Authorizing Town of Galt, Ont., to lay a sewer cellar drain and storm drain under G.T.R. track at Kerr St.

4086. Dec. 12—Approving U.S. Express Co.'s by-law authorizing the company's Superintendent of Traffic to prepare and issue tariffs of tolls.

4087. Dec. 12—Authorizing G.T.R. Co. to construct an additional track across St. Germain St., Plessisville, Que,

4088. Dec. 12 — Authorizing Can. Nor. Ont. Ry. to connect its tracks with C.P.R. tracks in Sudbury, Ont.

4089. Dec. 12—Authorizing G.T.R. to construct a culvert under its line in Bertie tp., Ont.

4090. Dec. 12—Authorizing G.T. Pacific Ry. to cross C.P.R. Pheasant Hills branch tracks, sec. 27, tp. 29, r. 22, w. 2nd mer., Saskatchewan.

4091. Nov. 10—Authorizing Montreal Park & Island Ry. to operate branch lines in Notre Dame de Grace, Que.

4092. Dec. 10—Authorizing Bell Telephone Co. to place its wires across C.P.R. tracks at St. Jerome, Que.

4093. Dec. 10 — Authorizing Innerkip Rural Telephone Association to place its wires across G.T.R. tracks in East Zorra tp., Ont.

4094. Dec. 3—Authorizing Guelph & Goderich Ry. Co. to take, without the consent of the owner, Mrs. F. Hawley's property, the easterly half of lot 104, Goderich, Ont., 1-10 of an acre.

4095. Dec. 4—Authorizing C.P.R to construct a subway crossing under its track on Second St. East, Calgary, Alta.

4096. Dec. 4—Authorizing the Village of Montmorency, Que., to lay a pipe under Quebec Ry., Light and Power Co.'s tracks.

4097. Dec. 16—Authorizing C.P.R. to open for carriage of traffic the portion of a diversion of the Medicine Hat section of its line at Cummings, Sask.

4098. Nov. 20—Authorizing Guelph and Goderich Ry. to cross at rail level 12 highways in Wellesley tp., Ont.

4099 to 4104. Dec. 16—Authorizing Bell Telephone Co. to carry its wires across C.P.R. tracks at various points.

4105. Dec. 16—Authorizing C.P R. to cross, at grade, the Winnipeg, Selkirk and Lake Winnipeg Ry. track near Selkirk, Man.

4106. Dec. 16—Authorizing Crow's Nest Southern Ry. to place its telegraph wires across the C.P.R. at Hosmer, B.C.

4107. Dec. 16—Approving location of Grand Valley Ry. at Brantford, Ont., from mileage 0 to 24, near the north limit of Simcoe, and from mileage 26, near the south limit of Simcoe, to mileage 33.5 in Port Dover.

4108. Dec. 16—Authorizing C.P.R. to instal an interlocking plant where it crosses the G.T.R. near the Asylum, London, Ont.

4109. Dec. 16—Authorizing B. & H. E. Ry. to open for traffic the portion of its railway from Hamilton to Ancaster, Ont.

4110. Dec. 16—Approving plans of new work in connection with bridge on C.P.R. Edmundston Branch, Grand Falls, N.B., and rescinding order 3352 of July 26, 1907.

4111. Dec. 17—Authorizing Montreal Park and Island Ry. to construct a branch line from its main line to the Blue Bonnets Jockey Club, Montreal.

4112. Dec. 17—Authorizing Montreal Terminal Ry. to construct a branch line from its main line to the Mount Royal Cemetery, Montreal.

4113. Dec. 17—Approving Pacific Express Co.'s contract forms, and allowing the said company to use them until Mar. 1, 1908.

4114. Dec. 17—Authorizing G.T.R. to construct two spurs in Brantford, Ont., to the Brantford Box Co., and to the Ham & Nott Co.'s premises.

4115. Dec. 17—Authorizing G.T.R. to construct a spur line in Aylmer, Ont., to the Canadian Condensed Milk Co.'s property.

* * *

The G.T.R. has made application to the Board of Railway Commissioners to give a ruling as to the interpretation of the Lord's Day Observance Act, with regard to the right of the railways to switch and break up freight trains on Sundays. Pending the issue of this ruling the case against the G.T.R. for operating freight trains at Toronto in contravention of the Act has been dropped.

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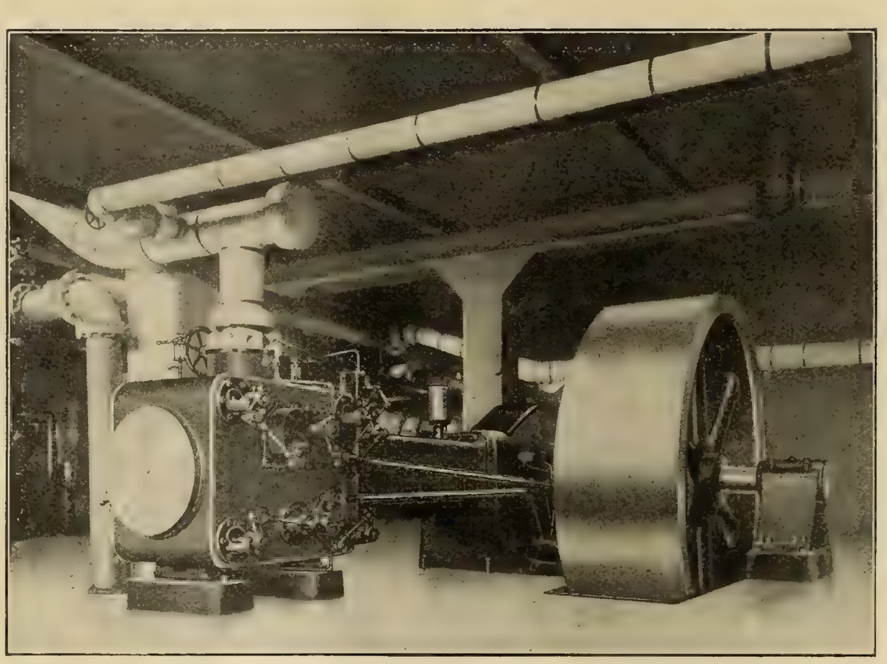

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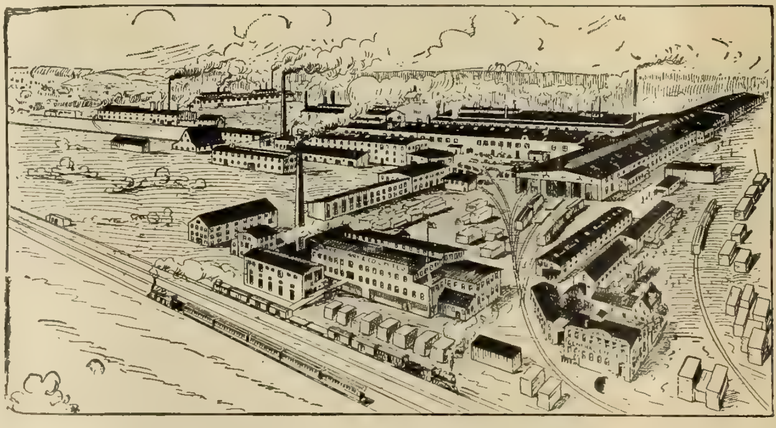

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Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta Northwestern Ry.—Application will be made at the current session of the Dominion Parliament for an act incorporating a company with this title to construct a railway from the Calgary and Edmonton Ry. between Olds and Red Deer, Alta., northwesterly along the valley of the Red Deer, Raven and Clearwater rivers to near Rocky Mountain House on the North Saskatchewan River, thence westerly along the valley of that river to the Kootenay Plains, in the Rocky Mountains and from the North Saskatchewan River valley between Big Horn and Sheep rivers, to Brazeau River, and along the MacLeod River to the G.T. Pacific Ry.

Alberta Oil, Coal and Wheat Ry.—A bylaw guaranteeing the bonds of the company to the extent of $25,000 was voted on by the residents of Pincher Creek, Alta., Dec. 10. The company agrees to construct a railway from the C.P.R. to Pincher Creek within a year.

Bangor and Aroostook Ry.—The annual report shows that the company operates 482 miles, against 456 in 1906. It has at present four terminal points at the International boundary along the valley of the St. John River, viz., at Fort Fairfield, Me., where it effects a junction with the Aroostook branch of the C.P.R.; Limestone, Me.; Van Buren, Me., opposite St. Leonards, a station on the C.P.R., and the terminus of the International Ry. of New Brunswick, now under construction from Campbellton, N.B.; Fort Kent, Me., opposite Clair, N.B., a station on the Temiscouata Ry. The report states that construction was begun in the spring of 1907 on a cut-off from South Lagrange, north to the main line between Schodie and Seboois, Me., and it was expected to have a train service in operation over it at an early date. It is a shorter route with lower gradients than the old line via Brownville. A line known as the Allagath Line is projected north through the wilderness about Mount Katahdin, to a connection with the Temiscouata Ry. at its eastern terminus—Connors, N.B., on the St. John River.

Belleville and North Hastings Ry.—The House of Commons has made an order for the production of all papers, writings and letters between the Government and the Belleville and North Hastings Ry., or the G.T.R., or any other railway, or any one on behalf of any railway, relating to the granting and payment of the subsidies to the B. and N.H. Ry., under 48-49 Vict., cap. 59, and 49 Vict., cap. 10, including the agreement executed by the company under which the subsidy was paid and the cheque given in payment.

The Belleville and North Hastings Ry. Co. was incorporated by an act passed by the Ontario Legislature in 1874, and subsidy contracts were entered into with the company by the Dominion Government under chap. 59 of 48 and 49 Vict., and chap. 10, 49 Vict. The first of these subsidies was for a line from Madoc to the junction with the Central Ontario Ry. not exceeding $1,500 a mile, or not exceeding in the whole $10,500; and the second was for seven miles of railway from the village of Madoc to the junction with the Central Ontario Ry. at Eldorado in addition to the first mentioned subsidy, not exceeding $1,700 a mile, or not exceeding in the whole $11,900. The report of the Department of Railways and Canals for the financial period ended Mar. 31, 1907, shows the mileage constructed to that date to have been 6.48 miles, and the subsidy earned and paid $20,888. The line constructed extended from Madoc, the terminus of a branch of the G.T.R. running northward from Belleville, crossing the C.P.R. at Ivanhoe, to Eldorado, on the Central Ontario Ry. From Madoc a branch line was also constructed to Bridgewater or Actinolite, as the post office is called. The lines to Eldorado and Bridgewater were constructed to accommodate the traffic which it was expected would result from the development of the mineral resources of the district. The mines were not developed and the lines have not been operated by the G.T.R. for some years. The line from Belleville to Madoc, however, is being operated.

Bracebridge and Trading Lake Ry.—An action arising out of the application for the renewal of the Dominion subsidy for the construction of this projected railway is before the Ontario courts. The plaintiff is E. A. C. Pew, a contractor, of Toronto, and formerly of St. Catharines, Ont. who is seeking to recover $1,000 from F. C. Norris, a promoter residing in Detroit, Mich. The case for the plaintiff is that Norris employed him in 1904 to go to Ottawa for the purpose of interviewing members of the Government and members of Parliament with a view of securing the revote of the subsidy originally granted in 1900. A cheque for $100 was given Pew for expenses, and Norris in a letter said: "If the results of our mutual efforts prove successful, there is $1,000 more for you and your helpful friends at Ottawa." The subsidy was revoted, and Pew claims the $1,000. Norris denies that the revote was obtained by the aid of Pew, and asks for an accounting of the $100. The matter is before the Master in Chambers on examination for discovery, and several points have been reserved for consideration.

Bruce Mines and Algoma Ry.—A survey party recently returned to Bruce Mines, Ont., after having completed a survey of a route for a line to connect Bruce Mines with the C.P.R. transcontinental line, about 125 miles. The Bruce Mines and Algoma Ry. has already been constructed from the lake shore, through Bruce Mines, to the Rock Lake Copper Mines, 16.62 miles, and the company has a charter to extend the line to the C.P.R. The present survey, it is reported, has been made by interests connected with the B.M. and A. Ry. Co., and the Ontario Government, and the party was in charge of Major G. K. Eddy, Quebec; J. H. Teare, MacLennan, Ont., and J. McCreight, Ontario Government lumber agent at Thessalon, Ont. Reports have been prepared and will be considered by the interests affected. It is stated that an excellent route has been found, following the river valleys for the greater part of the distance, and presenting very few engineering difficulties. The route outlined follows the west side of the Mississauga River all the way. About 20 miles from Bruce Mines are the Grand Falls of 50 ft., and about 25 miles further on are the Aubrey Falls of 150 ft., which it is suggested could be profitably developed to operate the line by electricity, as well as to supply power for manufacturing purposes. There is a large quantity of pine along the valleys, with some good hardwood ridges about ten miles out from Bruce Mines, and good agricultural land extends from that point to about ten miles south of the C.P.R. The point of junction with this line it is suggested would be near Rideout.

Canadian-Minnesota Bridge Co.—The construction of the piers and abutments for the bridge over the Rainy River, to connect up the Duluth, Rainy Lake and Winnipeg Ry., and the Canadian Northern Ry., has been completed, and the steel superstructure is being put in place. It was expected to have the bridge ready by Dec. 31. The Canadian Northern Ry. is constructing a spur line of 1½ miles to connect its main line at Fort Frances, Ont., with the bridge, the Ontario end of which is at Pither's Point. As soon as the work is completed trains will be run through between Duluth, Minn.; Winnipeg, Man., and Port Arthur, Ont. The bridge was built by the Canadian Minnesota Bridge Co., which is composed of representatives of the Canadian Northern Ry., and of the Duluth, Rainy Lake and Winnipeg Ry. (See Duluth, Rainy Lake and Winnipeg Ry., Nov. 1907, pg. 829.)

Central Ontario Railway.—The extension from Bancroft northerly to Whitney has been opened for traffic to Maynooth, 15 miles, and about eight miles of grading has been done beyond Maynooth. We were advised Dec. 9 that the contract for the extension to Whitney had not been let. (Dec., 1907, pg. 923.)

Crow's Nest Southern Ry.—The line under construction from Fernie to Michel, B.C., is an extension of the line at present in operation from the International boundary, where a connection is made with a branch of the Great Northern Ry., U.S. The extension follows the valley of the Elk River to the mouth of Michel Creek, then follows the valley of this creek to the town of Michel, a distance of 21 miles. The maximum gradient is 0.8%, and the maximum curvature 3°30′. The total rise is 600 ft., and there is no adverse gradient; there are in all 11 curves, and the longest tangent is 6.72 miles. In general, the valley followed is a broad, flat one, and presents no very difficult engineering features. The Elk River winding across it has to be crossed four times and its channel changed once. This was probably the most difficult task, but was accomplished without much trouble. The bridges are of the ordinary Howe truss type, two spans of 150 ft. each. at each crossing, and two spans of 125 ft. each at the crossing of Michel Creek. P. E. Thian, who has charge of the Great Northern Ry. construction in Canada, is Chief Engineer, and D. Taylor, Fernie, B.C., is Division Engineer in charge of construction. (Dec., 1907, pg. 889.)

Crow's Nest Pass to Grave Creek.—Application will be made next session of the British Columbia Legislature for an act incorporating a company for the purpose of constructing a railway from near Crow's Nest Pass on the C.P.R., to the summit of the divide between the north fork of Michel Creek and the waters of Grave Creek, via the west side of the north fork of Michel Creek to the confluence of the two north branches of the same; with power to construct branches not to exceed in any one case 50 miles. E. V. Bodwell, Vancouver, B.C., is solicitor for the applicants

Detroit River Tunnel.—The second section of the tunnel was laid in the river between Detroit, Mich., and Windsor, Ont., Nov. 25, and joined up to the section previously laid. These sections have been laid on the bed of the river at the Detroit side. No further sections will be laid during the winter. The construction of the approaches to the submarine portion of the tunnel are being pushed on both sides of the river, and will be continued during the winter. (Nov., 1907, pg. 829.)

Dominion Atlantic Ry. Application will be made at the current session of the Dominion Parliament for an act authorizing the company to construct a line from between Kentville and Canning, N.S., westerly to between Berwick and Middleton, or to some point between the company's main line and North Mountain.

Eastern British Columbia Ry.—Application will be made next session of the B.C.

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Legislature for an act incorporating a company with this title for the purpose of constructing a railway to be operated by steam, electricity or other motive power from The Loop, or the South Fork of Michel Creek, on the C.P.R. Crow's Nest branch, southerly up the creek to the East Fork, easterly and southerly along the East Fork to the summit between the creek and Flathead River, thence southerly to the Flathead River and along its valley to the International boundary, a distance altogether of about 50 miles. Harvey, McCarter and Macdonald, Cranbrook, B.C., are solicitors for the applicants.

Edmonton to Dawson.—Dr. Thompson, M.P. for Yukon, in a recent interview at Toronto, said what the Yukon wanted, and what he would urge on the Government to do, was to assist in the construction of a railway from Edmonton, Alta., to Dawson, a distance of about 1,400 miles. Of this distance it was known that 600 miles would be through the rich wheat lands of the Peace River district. The remaining 800 miles would be through a district which had not been thoroughly surveyed, but it was fair to suppose that it was as rich in minerals as were some of the lands lying near to it. (Oct., 1907, pg. 743.)

Ha Ha Bay Ry.—Application will be made next session of the Quebec Legislature for an act incorporating a company with the title of La Compagnie de Chemin de Fer de la Baie des Ha Ha for the purpose of constructing a railway from between Jonquieres and Chicoutimi, on the Quebec and Lake St. John Ry. to Ha Ha Bay.

Halifax and Southwestern Ry.—C. W. Spencer, General Mnaager, has completed a trip of inspection over the line. He states that it is in excellent shape, and that a number of new industries are springing up at various points. E. V. Johnston, one of the inspecting engineers of the Department of Railways, has also completed an inspection of the line.

A survey is being made with a view of extending the branch of the old Nova Scotia Central Ry., now terminating at Caledonia, to Bear River, N.S. The municipalities through which the line would pass are reported to be preparing to offer subsidies in aid of the construction. Bear River is situated a few miles from Digby, and the construction of the line would bring the H. and S.W.R. to the tidal water of the Bay of Fundy at an additional point to Victoria Beach, the terminus of the company's Middleton and Victoria Beach line (Sept., 1907, pg. 663.)

A large wharf has been constructed by the company at Lunenburg, N.S., for the shipment of lumber. The wharf at Port Wade, the terminus of the Middleton and Victoria Beach branch on the Bay of Fundy, has been completed by the Dominion Government. There is a depth of 30 ft. of water at the end of the wharf at low tide. The port is well sheltered, and will be used by the railway for passenger and freight trade to U.S. points.

Howe Sound, Pemberton and Northern Ry.—An announcement was made at Vancouver, B.C., Dec. 3, to the effect that arrangements had been completed for making an early start on the construction of this railway. Reconnaissance surveys have been completed from Squamish, at the head of Howe Sound, to Anderson Lake, 92 miles, and it was expected that the surveys for location would be started by Dec. 31. It is proposed to operate the line by steam at the outset, but as there are some water powers on the Squamish River, it is proposed to develop electricity at convenient points and utilize it on the line, as there will be some heavy gradients back of Howe Sound. The company was incorporated last session of the B.C. Legislature.

Hudson Bay.—Notice of motion was given Dec. 3, by Mr. Knowles, in the House of Commons, that he would move a resolution to the effect that the Government should, on account of the rapid development of Western Canada and the continued inadequacy of existing transportation facilities, take early action towards the construction of a railway to Fort Churchill, Hudson Bay.

Intercolonial Ry.—A contract has been let to D. Sutherland, for the construction of a spur from the I C.R. tracks at North Sydney, N.S., to the mouth of the McKay colliery It was expected to be completed by Dec. 31. (Dec., 1907, pg. 889).

Tenders are under consideration for the construction of a locomotive house at Newcastle, N.B.

Surveys have been made for the construction of a branch line to connect the Drummond Mining Co's iron mine in New Brunswick with the main line. Two routes have been surveyed, the shorter, 11 miles long, would entail the construction of a bridge across the Nepisiguit River. The second route is 15 miles long, and could be constructed without any bridges.

The Minister of Railways in a recent speech stated that a large amount of money is being expended upon improvements of the road. The new concrete shops and terminals under construction at Moncton, N.B., were large enough to accommodate the G.T. Pacific Ry., as well as the Intercolonial Ry. A contract for a gas-producer plant for the supply of power and light had been let; doubletracking had been started between Moncton and Halifax; and new and heavier bridges were being put in on the old Canada Eastern Ry., which was now part of the I.C.R.

Kemptville Junction to South Indian, Ont.—Several meetings have been held at Metcalfe and Russell, Ont., for the purpose of promoting the construction of a railway through Russell tp.; the suggested route being from either Kemptville Jct., or Mountain, across country to the G.T.R. near South Indian. It has been decided to organize a company to secure a charter for the construction of such a line.

Kettle Valley Lines.—Reports from Grand Forks, B.C., state that it is intended to commence work on the extension of the Spokane and British Columbia Ry. from Republic to Spokane, Wash. The right-of-way through the Colville Indian reserve has been secured. The route of the extension follows the San Poil River valley from Republic, to its junction with the Columbia River. The southern bank of this river is followed down toward the east, to the mouth of the Spokane River and thence into Spokane. It is said that construction will be started at Spokane. The line is being operated between Grand Forks, B.C., and Republic, Wash., and an extension is under construction up the north fork of the Kettle River. H. W. Warrington, Grand Forks, B.C., is Chief Engineer and Superintendent.

Nova Scotia Steel and Coal Co.'s Ry.—A branch line of about 2.25 miles has been completed at no. 4 colliery, North Sydney, N.S., for this company. D. Sutherland was the contractor.

Ottawa Terminals Ry. Co.—It is expected that tenders will be asked early in Jan. for the construction of the projected new terminal station at Ottawa. A model of the station and hotel building was expected to be ready for exhibition Dec. 31. (Nov., 1907, pg. 801.)

Owen Sound and Meaford Ry.—Application will be made at the current session of the Dominion Parliament for an act granting an extension of time for the construction of a railway between Owen Sound and Meaford, Ont. (Nov., 1907, pg. 831.)

Pere Marquette Rd.—The turntable at the London, Ont., roundhouse has been lengthened and strengthened so as to accommodate the larger locomotives now being used on the line. (Dec., 1907, pg. 889).

A conference between the officials of the Pere Marquette Rd. and the G.T.R. respecting terminal facilities in London, Ont., took place Dec. 6, and General Manager Cotter subsequently interviewed G.T.R. officials in Toronto and Montreal in reference to the matter. At present the terminal facilities used by the Pere Marquette Rd. in London are utterly inadequate, and the roundhouse is not sufficiently large to accommodate the freight locomotives. (Dec., 1907, pg 889).

Pontiac Central Ry.—Application will be made at the current session of the Dominion Parliament for an act declaring the P.C. Ry. to be a work for the general advantage of Canada, and to authorize the company to extend its railway to James Bay along the valley of the Nottaway River, and also southerly to near Brockville, Ont. (Dec., 1907, pg. 923.)

Port Simpson and Eastern Ry.—D. B. May, formerly connected with the U.S. Government service in Alaska, is one of the promoters of this railway. He states that a company of U.S. and British capitalists has been organized to construct the line, which would be 1,450 miles long, and extend from Port Simpson, B.C., to Fort Churchill on Hudson Bay. Terminal facilities had been acquired at both places by the company. The summit of the Rocky Mountains at which the line would cross is 2,400 ft. above sea level. He had been over the whole of the ground and found that the climatic conditions were much more favorable than were generally supposed. The line would open up for development 500,000 square miles of land capable of growing wheat. (See Northwest Pacific Ry., Nov., 1907, pg. 831).

Port Simpson to North Skeena Passage.—The British Columbia Legislature will be asked next session to pass an act incorporating a company with power to construct a railway from Port Simpson to the North Skeena Passage, B.C. C. J. Prior, Victoria, B.C., is acting for the applicants.

Quebec and New Brunswick Ry.—Application will be made at the current session of the Dominion Parliament for an act authorizing the construction of a railway from near St. Charles Junction, St. Anselme or Chaudiere Junction, Que., to the boundary line between Quebec Province and the State of Maine, in the 13th township of that state, and with authority to make connection with any railways in the state. It is also desired to have power to lease any such railway in Maine. or for obtaining running rights over any such railway; or to aid in the construction and operation of any such railway. The Q. and N.B.R. was originally incorporated with the object of constructing a short line of railway between Quebec city and Edmundston, N.B., and some construction was done at this latter point in 1902-03. The company has secured amendments to its charter from time to time, as to the route of the projected railway as well as in the way of extensions of time for construction. Hon. J. Costigan is President of the company. (Sept., 1907, pg. 665).

Quebec Bridge and Ry. Co.—In his speech at the opening of the current session of Parliament the Governor-General said: "The sudden and unexpected collapse of the great cantilever bridge in course of construction across the St. Lawrence in the vicinity of Quebec, may be regarded as a national calamity, and the event has evoked much sorrow for the lives which were lost on that occasion. A Commission has been appointed to inquire into the causes which led to the disaster. When received, the report

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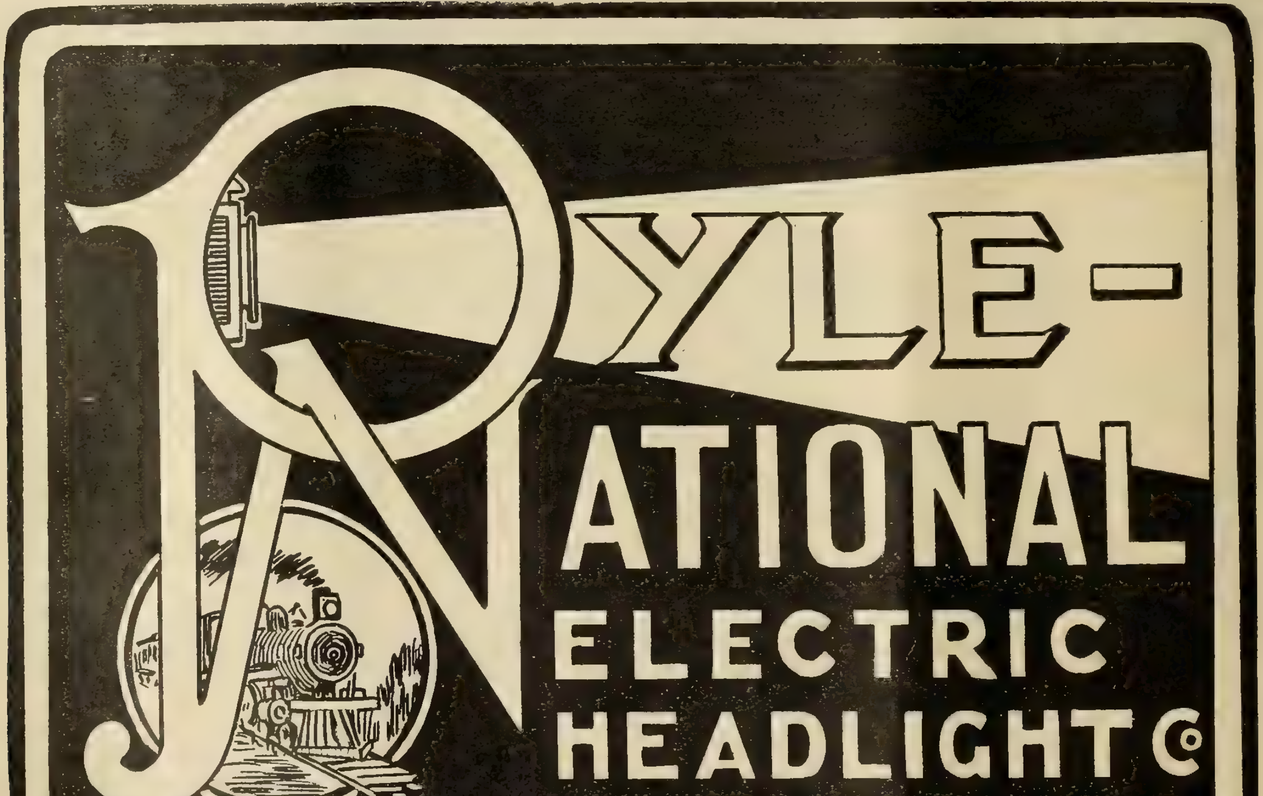

of the Commission will be laid before you. It will be necessary to devise means for the completion of the bridge within a reasonable time."

H. Holgate, Montreal, Chairman of the Commission, stated, Dec. 3, that he expected the report would be ready by the end of the month. Some further evidence was required to be taken in New York to clear up some points. "The evidence," Mr. Holgate is reported to have said, "makes it pretty clear where the blame for the collapse of the bridge rests, and the report will probably place the responsibility definitely."

Quebec, Montreal and Southern Ry.—During the past season considerable work has been done on the line between St. Lambert and Pierreville, Que., straightening out curves, raising the roadbed, and putting in additional ballast. As a result the standard of the roadbed has been materially improved. Upon the extension from Pierreville towards Quebec Bridge, for 48 miles of which a contract was let to O'Brien & Mullarkey, considerable progress has been made. Grading is well advanced over the whole distance covered by the contract, the substructures of the bridges at Nicolet, Becancour, and Gentilly, as well as the culverts, are all practically completed, and the steel for the superstructures has nearly all been delivered. It was reported Dec. 1 that four miles of steel, 80-lbs. to the yard, had been laid eastwards from Pierreville. The extension follows the south shore of the St. Lawrence River practically all the way, and has easy curves and gradients. It is expected that the contract for the remaining 41 miles, which will carry the line to Levis, will be let during the winter. With the exception of the bridge over the Grand River, Deschene, which will be about 1,400 ft. long and 135 ft. above high water mark, the additional distance presents few engineering difficulties, and it is hoped that the whole extension will be completed by the end of the year.

Reid Newfoundland Ry.—As a result of the heavy storm of Dec. 2, there was a washout on the Newfoundland Ry., about 20 miles from Port Aux Basques. Repairs were made, and traffic was resumed within a week.

St. Mary's and Western Ontario Ry.—We are advised that the section of this railway between St. Mary's and Embro, Ont., is now nearly ready for tracklaying, and that this work will be gone on with at once. The C.P.R. is constructing a short piece of line from the main line at Embro station, to connect with the St. M. and W.O. Ry. near Embro village. The grading of this piece of line is well advanced, and it is expected that the line between St. Mary's and Embro will be ready for operation in June. A survey is being made for the extension of the line from St. Mary's to Sarnia. The route has been approved by the Minister of Railways and it is the intention of the company to locate the line during the winter. The route, after passing under the G.T.R. Sarnia branch at St. Mary's, will probably pass through Kirkton and Exeter, and thence to Sarnia, traversing a fine line of country at present only very partially served by railways. The survey is in charge of G. E. Hyde, under the direction of J. G. Macklin, Chief Engineer.

Sydney and Louisburg Ry.—Grading is being gone on with upon the branch to the coal mine which is being opened in the Victoria District, N.S., by the Dominion Coal Co. The branch starts from the main line near Grand Lake and proceeding along the valley of the Northwest Brook, joins the old location made some years ago. The contract for clearing, grading, etc., was let to the Lindsay Construction Co. We are advised that the clearing is well advanced and about half a mile from the junction with the main line has been graded

Temiskaming and Northern Ontario Ry.—A report is said to have been made to the T. and N.O.R. Commission by A. True, C.E., upon the question of lowering the gradient from 1.5% to 0.5%. The report gives plans and profiles of the first 21 miles of line from North Bay, and shows that the reduction of the gradient can only be accomplished by lengthening the line seven miles. The Commissioners have the report under consideration.

Vancouver Island and Eastern Ry.—The question of the proposed application to the Dominion Parliament for an act incorporating a company with this title to construct a railway from Victoria to Seymour Narrows, and from the mainland side of the Narrows to Edmonton, Alta., with a ferry across the Narrows, was discussed at a recent meeting of the Victoria Board of Trade. An opinion was expressed in general terms favorable to the construction of such a railway, and the proposal was referred to the railway committee for consideration and report (Dec., 1907, pg. 889).

Vancouver, Westminster and Yukon Ry.—J. Hendry, President, submitted an agreement to the Vancouver, B.C., City Council, Dec. 4, respecting the construction of terminals in that city. The suggested agreement proposed to change the reservation of sections of the False Creek foreshore, as at present proposed for specific railways, to a general reservation. Mr. Hendrie said it was the present intention to allow the Northern Pacific Ry. to acquire the location for its Vancouver yards. The consideration of the matter was adjourned to permit of a thorough examination of the agreement and plans. (Oct., 1907, pg. 743.)

White Pass and Yukon Ry.—A. L. Berdoe, General Manager, according to a Seattle, Wash., despatch of Dec. 4, said there were about 500,000 tons of copper ore in sight at the mines which would be reached by the branch line which it is proposed to construct. It is hoped to start the construction early in the spring. The company also proposed to erect bunkers at Skagway, Alaska, having a capacity of 5,000 tons for the storage of ore. The ore will be shipped from Skagway to the smelters on Puget Sound. (Nov., 1907, pg. 829.)

Winnipeg City Power Plant.—The Winnipeg Board of Control has granted the William Newman Co., the contractors for the grading of the 23 miles for the tramway from Lac du Bonnet to Pointe du Bois Falls, an extension of time to May 31. The original contract called for the completion of the work by Dec. 31, 1907. About seven miles of grading has been completed, and considerable work has been done on the remaining 16 miles. (Dec., 1907, pg. 889).

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The Saskatchewan Government decided, Dec. 19, to appeal against the C.P.R.'s exemption from taxation in that Province.

C. M. Hays, W. Wainwright and W. H. Biggar, of the G.T.R., and C. Drinkwater of the C.P.R., had an interview with the Dominion Minister of Railways, Dec. 16, when they presented their objections to the proposed amendments to the Railway Act, providing for reciprocal demurrage, which they contended would be impracticable, as under it railway companies would be held responsible for delay in furnishing cars, notwithstanding any extraordinary traffic conditions over which they had no control. In this connection, the Canadian Manufacturers' Association transportation department recently resolved to petition the Dominion Government to press forward legislation dealing with reciprocal demurrage. This follows the Board of Railway Commissioners' expression of opinion that it had no power to impose regulations of that nature on the railway companies.

Canadian Northern Ry. Construction, Etc.

Canadian Northern Quebec Ry.—At the current session of the Dominion Parliament application will be made for an act authorizing the construction of a branch line from St. Jerome to St. Eustache, Que., and a line from Ottawa, via Hawkesbury, Ont., to Montreal, branching on Montreal Island to enter Montreal from the north-east and south-west.

Canadian Northern Ontario Ry.—Application will be made at the current session of the Dominion Parliament for an act authorizing the construction of a branch line from the company's authorized line between Udney and Rathburn, to Orillia, Ont.

Canadian Northern Ry.—The Dominion Parliament will be asked at its current session for an act authorizing an extension of time for the construction of the following previously authorized lines: From between Port Arthur and Fort Frances, Ont., easterly to Quebec, with branches to Port Arthur, Ottawa and Montreal; from north of the line between Winnipeg and Ste. Ann, Man., to the International boundary; from Regina to Humbolt, and via the Carrot River to Pas Mission, Sask.; and between Humbolt and the South Saskatchewan River to the crossing of that river south of Prince Albert; from Battleford westerly to the Brazeau River, Sask. In the same act power will also be asked to construct the following additional branch lines: From south of Neepawa, Man., to the main line crossing of the South Saskatchewan River; from Russell, Man., via Yorkton, to the authorized line near Goose Lake, Sask.; an extension of the Brandon-Regina line near the west boundary of Manitoba westerly to Lethbridge, Alta.; from Regina southwesterly to the International boundary; from Humbolt, Sask., southwesterly to Calgary, Alta.; from North Battleford, Sask., northwesterly to Athabasca Landing, Alta., with a branch to Green Lake; from Edmonton to the McLeod and Brazeau rivers; from Strathcona, southerly to Calgary, Alta., with a branch to connect with the authorized line from Regina to Red Deer River, Alta.

D. D. Mann, Vice-President, recently completed a trip of inspection over the company's lines. He said that about 300 miles in all would represent the construction work during the season of 1907. The work on the proposed extension to Goose Lake had been temporarily held up on account of a difference between the company and the Saskatoon council as to the route through that town. The new shops at Fort Rouge, Winnipeg, were expected to be completed at an early date, and the work on the joint terminals was progressing and would be pushed on as fast as possible.

The extension of the line from Brandon, Man., to Regina, Sask., was completed Dec. 11, and a special passenger train was run through. A freight service is being operated over the line, and a passenger service will be put in operation as soon as the ballasting and other work has been completed. The distance between the two points is 219 miles, and the line includes the branch running westerly from Brandon, which crosses the Hartney-Virden line at Agnew. At Regina connection is made with the Qu'-Appelle, Long Lake and Saskatchewan Ry., now operated as part of the C.N.R. system, so that the C.N.R. has junctions with it at Regina, Saskatoon and Prince Albert.

A deputation from the Goose Lake district of Saskatchewan arrived at Ottawa, Dec. 9, to urge on the Government the importance of the construction of the line from Saskatoon to Delisle. Grading has been done on about 30 miles of the distance,

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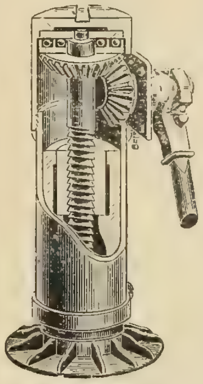
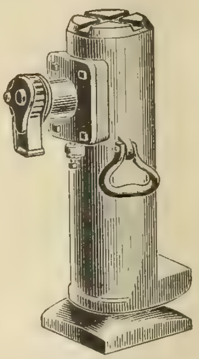
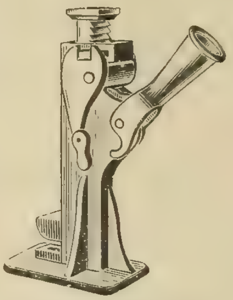

Sectional View


Foot Lift Jack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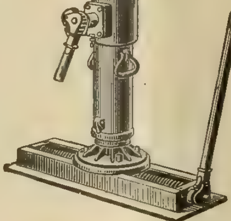
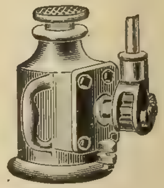

Traversing Jack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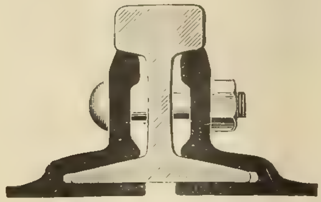
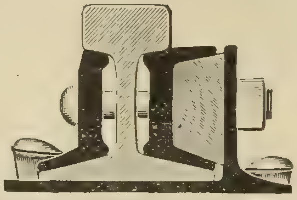
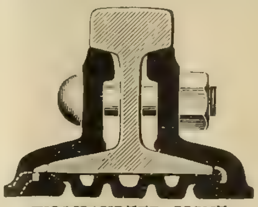

CONTINUOUS JOINT


WEBER JOINT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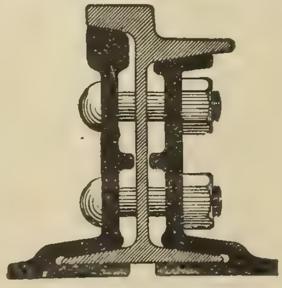
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WE MANUFACTURE IN CANADA.

and the deputation asked that the rails be laid and the branch completed as fast as possible.

The construction of locomotive and car repair shops at Edmonton, Alta., to give employment to about 200 men, is reported to be contemplated in the spring. (Dec., 1907, pg. 897.)

Edmonton, Yukon and Pacific Ry.—The Dominion Parliament will be asked at its current session for an act authorizing the construction of a branch line from some point on the previously authorized line to Vancouver, B.C., and a branch or branches to the headquarters of the McLeod and Brazeau rivers. An extension of time will also be asked for the construction of the previously authorized line either to the Yellow Head Pass or the Peace River Pass, and thence to a port in British Columbia, or to connect with the authorized line of the British Pacific Ry. Co.

C. P. R. Betterments, Construction, Etc.

Proposed Atlantic Terminus.—C.P.R. engineers are said to have been busy for some time past in the vicinity of L'Etang, N.B., and local reports state that it is the intention of the company to develop the port of L'Etang as the terminus for its trans-Atlantic steamship business. An act was passed last session of the New Brunswick Legislature providing for the formation of the Canada Atlantic Terminal Ry., to construct a railway from the St. Croix River to L'Etang harbor; to construct piers, wharves, docks, etc., there, and to operate steam and other vessels

Montreal Cattle Market.—An agreement has been entered into between the C.P.R. and the Montreal City Council, which settles the differences respecting the east end cattle market. The C.P.R. undertakes to spend $180,000 on rebuilding the market and to have it ready for use by May 1. The city is to pay the C.P.R. $3,000 a year for market accommodation and to have the right of collecting all market fees.

Westmount Station.—The new station at Westmount, Que., which was opened for business Dec. 1, is situated at the corner of Victoria Ave. and St. Catherine St., and is on the Westmount side of the tracks. It is a combination cement and brick structure, and is considerably larger than the old station at the foot of Abbott St., which has been abandoned.

Northern Colonization Ry.—It is reported that one of the new pieces of line upon which construction will be started in the spring is the extension of the Northern Colonization Ry. from its present terminus at Nominingue, Que., to a junction with the old Gatineau Valley Ry. (the Ottawa and North-Western Ry.) at Maniwaki, Que. The extension will be about 40 miles long. A contract for the extension of this line from 10 miles northwest of Nomining, for 25 miles further to Rapide l'Orignal, has been let to the Toronto Construction Co., the contract including grading, tracklaying and ballasting. The Toronto Construction Co. will also lay tracks on the 10 miles from Nomining northwesterly, which was graded by the Orillia Construction Co.

Vaudreuil-Smith's Falls Second Track.—A considerable amount of work was done during the summer and fall of 1907 in connection with the construction of a second track between Vaudreuil, Que., and Smith's Falls, Ont. The work done includes the reduction of the gradients, and increasing the radius of the curves, so that better speed may be made and heavier loads drawn. A local report states that progress on the work has been so satisfactory during the past season that the whole distance between Vaudreuil and Smith's Falls will be ready for the rails in the near future.

Smith's Falls-Toronto Second Track.—Reports state that the work of constructing a second track on the Ontario Division between Smith's Falls and Toronto will be gone on with early in the season, and that it is expected to have it completed by the end of the year.

Walkerton and Lucknow Ry.—Construction on this line is reported to have been suspended for the season.

Guelph and Goderich Ry.—Track is reported laid on the Listowel branch as far as the Carthage side road, and the grading gang is at work at the boundary of Elmer and Mornington townships.

Port Arthur Station, etc.—The new station was opened for public use Nov. 28. A description of the building was given in our June, 1907, issue. It is expected that a new dock for the accommodation of the passenger business of the company's lake steamships will be constructed at Port Arthur during the coming season.

Fort William-Winnipeg Second Track.—About 300 miles of the second track construction between Fort William, Ont., and Winnipeg has been completed, and is being utilized for traffic. The remainder of the work is well advanced, as it is expected the second track for the whole distance will be available for traffic by the fall.

Saskatoon Easterly.—Tracklaying has been completed easterly from Saskatoon, Sask., to Lanigan, the point of junction between the Pheasant Hills branch, from Kirkella, and the Manitoba and North-Western Ry. A special train ran over the Pheasant Hills branch into Saskatoon, Dec. 10.

Strathcona-Edmonton High Level Bridge.—In connection with the project to construct a high level railway and general traffic bridge across the Saskatchewan River, to connect Strathcona and Edmonton, Alta., no definite plans have been prepared. The civic authorities of Edmonton and Strathcona entered into communication with the C.P.R. with a view to the provision of a roadway for general traffic upon the bridge which that company proposed to erect to carry the extension of the Calgary and Edmonton Ry. into Edmonton. As a result of the negotiations an agreement has been reached as to the proportion of the cost of the bridge to be borne by the municipalities, and they are now arranging the financial question between themselves. The estimated cost of the bridge is between $650,000 and $750,000, and we were advised, Dec. 10, that the city officials were hopeful that the agreement would be successfully carried through.

The bridge which it is hoped to have erected will be a double-decked structure, the steam railway tracks being carried under the traffic floor, on which will be provided tracks for the electric railway. The bridge will be 260 ft. above water level. The landing on the Edmonton side of the river will be near the site of the Provincial Legislature building. Jasper Ave. will be crossed overhead with a 60-ft subway.

Kootenay Branch Electrification.—We are officially advised that there is no truth whatever in the press reports referred to in our last issue that the Kootenay branch of the Columbia Western Ry. would be operated by electricity.

Kootenay Central Ry.—Reports from Golden, B.C., state that there are about 20 engineers engaged on survey work upon the route of this projected railway between Golden and Fort Steele, and that a construction train has been sent out from Revelstoke in connection with the starting of grading. It is further stated that a large part of the railway will be under construction at a very early period, and the whole line pushed through to completion as soon as possible

Esquimalt and Nanaimo Ry.—The rearrangement of the terminal facilities in Victoria, B.C., it is reported, will be undertaken at an early date. The site at present occupied by the Albion Iron Works is to be included in the new yard area, and this has to be cleared before actual work can be commenced

R. Marpole, General Executive Assistant, returned to Vancouver, Dec 1, after a trip over the route of the projected extension from Wellington to New Alberni. He says the clearing of the right-of-way will be completed this winter, and the construction of the line taken in hand as soon thereafter as possible.

Surveys are also being made, it is reported, for the construction of a line to the Campbell River.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—U.S. press despatches state that the company is reported to have announced its intention of constructing the Duluth and Thunder Bay Rd. to connect its new Duluth (Minn.) line with the C.P.R. at Fort William, Ont., about 200 miles. About half the distance is now covered by logging roads, which will be used as part of the through line. (Dec., 1907, pg. 909.)

The C.P.R. and the Bay of Quinte Ry.

Local press reports state that C.P.R. officials made a trip of inspection over the Bay of Quinte Ry. Dec. 12, with a view of taking it over. The B. of Q.R. is at present owned by the Rathbun Co. interests, and has a length of 93.37 miles. It extends from Deseronto to Bannockburn, 76 miles; Deseronto westward, 2 miles; Deseronto to Deseronto Junction, 4 miles, and Yarker to Sydenham, 11.37 miles. The line is laid with 56 and 70 lb. steel rails, and there are 11.30 miles of sidings. It owns eight locomotives; six first-class cars; two combination passenger, baggage and express cars; three baggage, mail and express cars; 18 cattle and box cars; 129 platform cars, 20 coal cars; two conductors' vans, one snow plow, and two flangers. Of these 160 are fitted with air brakes and automatic couplers. The operation for the year ended June 30, 1906, showed: Gross earnings, $267,471.15; operating expenses, $182,138.46; net earnings, $85,332.69; train mileage, 224,552 miles of mixed trains; engine mileage, 224,552 miles; passengers carried, 101,661; freight carried, 311,164 tons. Financial statement: Capital stock—authorized, $1,500,000, subscribed and paid up, $930,000; preferred stock, subscribed and paid up, $465,000; 5% bonds, authorized, $1,000,000, subscribed and paid up, $930,000; subsidies—Dominion Government, $69,120 and $208,732.80; Ontario, $84,000; municipal, $197,990.43; total capital subscribed and paid up, $2,884,843.23. Cost of railway and equipment, $2,980,174.57. Floating debt, $68,297.73 at 6%.

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The Canadian Northern Ry. has put into operation a uniform passenger rate of 3 cents a mile on its lines in Saskatchewan and Alberta.

The American Railway Association's committee on car efficiency, in a bulletin covering car surpluses and shortages on Nov. 13 and 27, says: "It will be noted that the shortages, which amounted to over 90,000 on Oct. 30, have been practically wiped out. The principal remaining shortages are in the New England, New York, New Jersey, Delaware, Maryland and Eastern Pennsylvania groups and the Canadian lines." The total figures for 159 lines on Nov. 27 are surpluses, 40,448; shortages, 17,964. For the Caanadian lines the surpluses are 163, and the shortages 4,702.

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MAINLY ABOUT PEOPLE.

Mrs. Galt, wife of John Galt, consulting engineer, Toronto, died at Vernon, B.C., Dec. 7.

Hon. J. S. Hendrie, M.P.P., Hamilton, Ont., has been appointed a Commander of the Royal Victorian Order.

F. H. McGuigan, formerly Fourth Vice-President G.T.R., and Mrs. McGuigan, are spending the winter in California.

J. Rathwell, who served in the G.T.R. Brigade during the Fenian raid in 1866, died at Brockville, Ont., Dec. 17, aged 79.

L. Gorman, of the Richelieu and Ontario Navigation Co.'s local office at Montreal, died there after a lengthened illness, Dec. 13.

C. E. Lambert, since 1887 General Passenger Agent West Shore Rd., died at his home, Thiells, N.Y., from pneumonia, Dec. 10.

Sir H. Montagu Allan, C. R. Hosmer, H. A. Allan, C. M. Hays, and T. Long, have been re-elected directors of the Merchants Bank of Canada.

The engagement is announced of N. Waldie, son of the late John Waldie, Toronto, President of the Victoria Lumber Co., to Miss F. E. Heron.

G. L. Reid, at one time Chief Engineer of the Great Western Ry. of Canada, now the G.T.R., Hamilton, Ont., died at Brighton, Eng., Dec. 7, aged 79.

G. Cheer, Superintendent of Bridges and Buildings, G.T.R., Northern Division, Allandale, Ont., was injured at Glencairn, Ont., by a crowbar falling on him, Nov. 23.

Sir Robt. G. Reid, President of the Reid-Newfoundland Co., has been elected a director of the Lake-of-the-Woods Milling Co., in place of the late F. H. Mathewson.

Hon. G. P. Graham, Minister of Railways and Canals, was the principal guest at a dinner at Brockville, Ont., Nov. 26, promoted by the local Board of Trade.

D. M. Burchell, Mayor of Glace Bay, N.S., and formerly superintendent of stores for the Dominion Coal Co., was committed for trial on a charge of embezzlement, Dec. 15.

R. T. Dass, formerly train dispatcher, G.T.R., Stratford, Ont., has been appointed to the Northern Pacific Rd. dispatching staff, and stationed at Livingstone, Mont.

J. S. Blanchet has been elected to discharge the duties of Secretary of the Quebec Transportation Club during the absence from the city of the secretary, A. H. Davis.

E. O. Grundy, General Freight and Passenger Agent, Quebec Central Ry., Sherbrooke, Que., has been elected an honorary member of the Quebec Transportation Club.

Dr. Rachel R. Todd, daughter of T. W. Todd, Agent Canadian Ex. Co., Parkdale, Toronto, has been appointed a resident physician of the Evening Dispensary, Baltimore, Md.

His Honor Jas. Dunsmuir, Lieut.-Governor of British Columbia, has purchased the Hatley property of 250 acres on Esquimalt Lagoon, B.C., and will build a residence there.

W. Ainsworth was presented with a purse of money by the residents of Mille Roches, Que., Dec. 3, on the occasion of his leaving that place, where he had been G.T.R. agent for 37 years.

H. R. Charlton, G.T.R. Advertising Agent, has received a silver cigar box from the party of British newspaper men whom he accompanied during their trip through Ontario recently.

O. W. Murray, who died at Merrifield, Sask., recently, was a son of Jas. Murray, who was one of the C.P.R. staff taken to Winnipeg by Sir Wm. C. Van Horne and J. M. Egan in 1882.

E. W. Spence was presented with a silver tea service recently on leaving Qu'Appelle, Sask., where he was C.P.R. station agent, to fill a position in the company's claims' department at Winnipeg.

G. A. Grant, Secretary of the Quebec Cartage and Transfer Co., was presented with a silver fruit dish by the staff, on the occasion of his recent marriage to Miss Thompson in Montreal.

Miss K. Harty, only daughter of W. Harty, M.P., President Canadian Locomotive Works, was married at Kingston, Ont., recently, to H. Osler, of Winnipeg, son of E. B. Osler, M.P., Toronto.

Lord Strathcona was recently presented with a silver centrepiece by Canadian residents in Great Britain. The presentation was made by the Duke of Argyll, a former Governor-General of Canada.

Major A. E. Hodgins, who recently resigned his appointment as Divisional Engineer at Kenora, Ont., under the Transcontinental Ry. Commission, has taken up his residence temporarily in Victoria B.C.

T. Skinner, a C.P.R. director, presided at a dinner of the Canada Club in London, Eng., Dec. 4, the guests including Sir H. Montagu Allan, Montreal, and F. Ward, General Manager of the Commercial Cable Co.

A. H. Anderson, Purchasing Agent and Cashier, Quebec Central Ry., Sherbrooke, Que., was arrested recently on a charge of embezzlement, to which he pleaded guilty and received a sentence of five years in the penitentiary..

David Halstead, formerly excursion clerk C.P.R., Toronto, and subsequently travelling passenger agent, C.P.R., Calgary, Alta., died there recently of consumption. He was a brother of J. Halstead, Assistant General Freight Agent, Western Division, C.P.R.

R. R. Jamieson, General Superintendent C.P.R., was presented with a gold-headed ebony cane, a signet ring and a silver tea and coffee service, by the business men of Calgary, Alta., Nov. 30, on the occasion of his transfer from the Western to the Central Division.

Sir Thos. G. Shaughnessy, President C.P.R., has been elected a director of the Bank of Montreal. Lord Strathcona, Sir R. G. Reid, President of the Reid Newfoundland Co., and R. B. Angus, Director C.P.R., have been re-elected directors of the bank.

F. W. Myers, who was connected with the C.P.R. accounting department at Winnipeg during the construction period, and later was connected with the Illinois Central Rd. passenger department, was found dead in his room in an hotel at Minneapolis, Minn., Nov. 29.

The claim of H. E. Vautelet, formerly on the C.P.R. engineering staff, for $49,343.40, from the Dominion Government for the preparation of plans for the construction of steel sheds at Montreal Harbor, has been heard by the Exchequer Court and judgment reserved.

G. Gordon and Mrs. Gordon, Aylmer, Ont., whose recollections date back to the old trans-Atlantic vessel St. Lawrence, in 1844, celebrated the 60th anniversary of their marriage, Dec. 10. Mr. Gordon was engaged in the survey for the first railway line between Toronto and Hamilton, Ont.

E. D. Nash, heretofore Superintendent Central Vermont Ry., New London, Conn., has been appointed General Superintendent of the Chauguinola Ry., which is located in the northerly section of the republic of Panama, and is being constructed by the United Fruit Co. Its principal traffic will be bananas.

It is semi-officially announced at Ottawa that after pending legislation to increase the personnel of the Board of Railway Commissioners has passed, one of the new commissionerships will be offered to W. Whyte, Second Vice-President C.P.R. In railway circles it is not believed that Mr. Whyte would accept such an offer.

A. C. Shaw, General Agent C.P.R., Chicago, and his staff; C. L. Williams, City Passenger Agent, Chicago; C. W. Smith, T.P.A., Chicago; A. J. Blaisdell, C.P A., St. Louis; W. S. Merchant, T.P.A., St. Louis; and E. Merchant, T.P.A., Kansas City, have sent out a unique Christmas card, illustrating the origin of the Union Jack.

A. Piers, Manager of the C.P.R. Steamship Lines, was the principal guest at a dinner at the Forest and Stream Club, Dorval, Que., given by the officials of the company's steamship department, Montreal, prior to his sailing by the Empress of Ireland, Nov. 29, for Liverpool, Eng., where his office will be located in future.

W. Hamilton, who was recently appointed locomotive foreman G.T.R., Palmerston, Ont., was at one time railway assistant engine tester in the company's shops at Stratford, Ont., where he was subsequently made engine tester. Later on he was transferred to the Central Vermont Ry. as road foreman of locomotives, and remained with that company until appointed to his present position.

R. H. L'Hommedieu, General Manager; S. W. Brown, General Superintendent; M. B. Snow, Superintendent Western and Joliet Divisions; H. H. Adams, Superintendent Canadian and Michigan Middle Divisions, and G. H. Webb, Chief Engineer, Michigan Central Rd., were on a special train which collided with a light engine near Chelsea Green, Ont., Nov. 27. No one was injured by the collision, but both engines were considerable damaged.

Hon. J. I. Tarte, Minister of Public Works from 1896 to 1903, died at Montreal, Dec. 18, aged 60, after a comparatively short illness, though he had not been in good health for several years. During his term of office many improvements relating to transportation were carried through, and others of far-reaching importance inaugurated. Notable among these is the general improvement of the St. Lawrence route, including the Montreal Harbor. Since his retirement from active politics in 1903, he devoted himself almost entirely to journalism.

On W. Kennedy, Master Mechanic G.T.R., Toronto, leaving that position recently to become Superintendent of Motive Power of the Central Vermont Ry., the officials and employes of the mechanical department on the G.T.R. middle and southern divisions subscribed $780; of this $500 was given Mr. Kennedy in gold, together with a handsome diamond ring and an illuminated address. Owing to Mr Kennedy's recent bereavement it was decided not to have a public presentation, so C. L. Worth, chief clerk Master Mechanic's Office, Toronto, went to St. Albans, Vt., and made the presentation informally.

A. J. Gorrie, who recently resigned his position as General Superintendent of the Canadian Northern Quebec Ry., sailed from St. John, N.B., Dec. 27, with Mrs. Gorrie, to spend a couple of months in Great Britain. After his return he will on Mar. 1 become Managing Director of the Geo. Hall Coal Co., of Canada, Ltd., which has been incorporated recently with $200,000 capital. It has leased from the Dominion Government property on the Wellington Basin, Montreal, on which it is erecting an up-to-date coal handling plant. Last time Mr. Gorrie went to Great Britain he was on the S.S. Labrador when she was wrecked Mar. 1, 1899.

E. H. Boynton, who has been appointed New England Passenger Agent G.T.R., Boston, Mass., was born Sept. 22, 1864, at Oxford, Me., at which point his father had been station agent from 1861 to 1884.

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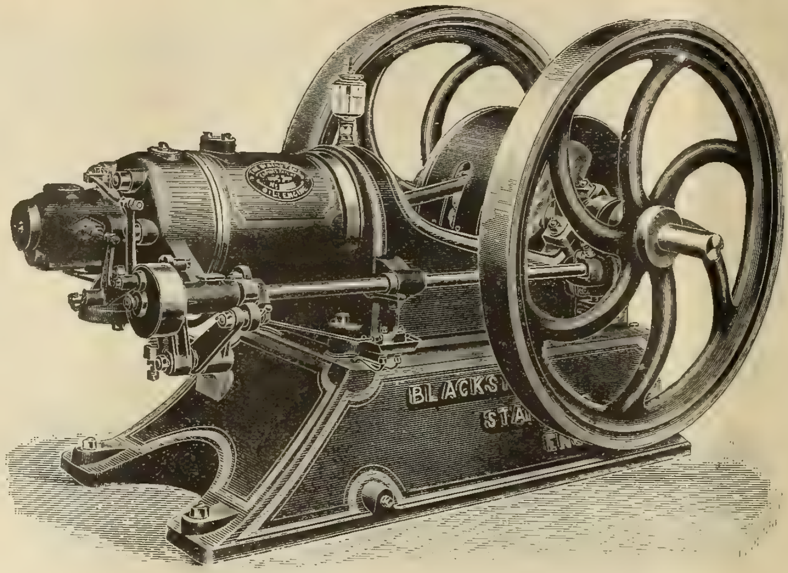

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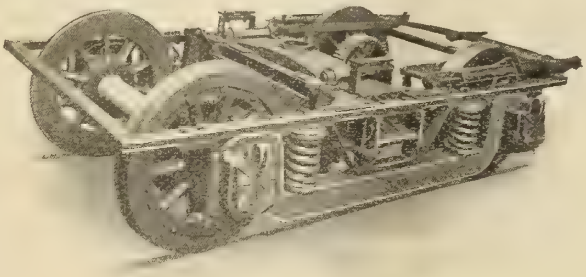
BALDWIN LOCOMOTIVE WORKS



BURNHAM, WILLIAMS & CO., Philadelphia, Pa., U. S. A.
BUILDERS OF
LOCOMOTIVES OF EVERY DESCRIPTION
Including
ELECTRIC LOCOMOTIVES
and
ELECTRIC TRUCKS

STANDARD STEEL WORKS

HARRISON BUILDING, PHILADELPHIA, PA.

F. H. BRYDGES & SONS, Winnipeg, Man., Representatives

STEEL TIRED WHEELS
SOLID FORGED ROLLED WHEELS
mounted on axles and fitted with Motor Gears for Electric Railway Service

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FORGINGS
ELLIPTIC AND
COIL SPRINGS
LOCOMOTIVE TIRES

Sessions-Standard
Friction Draft Gear
Simplest and Best

Both
Made by
Standard Coupler Co.
2 RECTOR STREET NEW YORK

Standard Steel
Platforms
Used by all Canadian Railways

He entered railway service in 1878 as assistant to his father, and succeeded him as station agent in 1884, remaining at Oxford until 1893, since which his record has been: Nov., 1893, to Aug., 1897, general agent G.T.R., Yarmouth and Yarmouth Junction, Me.; Aug., 1897, to Jan., 1902, general agent G.T.R., and agent Canadian Ex. Co., Berlin, N.H.; Jan., 1902, to Nov., 1907, general agent G.T.R., Lewiston and Auburn, Me.

W. H. Robertson, who has been appointed Assistant General Freight Agent C.P.R., Winnipeg, was born Feb. 14, 1870, and entered railway service 1889, his record being: 1889 to 1892, telegraph operator and agent, Chicago, Burlington and Quincy Rd.; 1892 to 1895, telegraph operator and Superintendent's chief clerk, same road; 1895 to 1896, telegraph department Illinois Central Rd.; 1896 to 1898, train dispatcher Chicago and Northwestern Rd.; 1898 to 1902, rate clerk General Freight Office, Minneapolis, St. Paul and Sault Ste. Marie Ry.; 1902 to April, 1903, tariff and rate clerk, Great Northern Ry., Seattle, Wash.; April, 1903, to Nov., 1907, chief clerk to Assistant Freight Traffic Manager, C.P.R.

D. A. Story, who has been appointed General Freight Agent, Intercolonial Ry., at Moncton, N.B., was born at Halifax, N.S., Oct. 26, 1853, and entered railway service May 26, 1869, in the Commissioner's office, Nova Scotia Ry., Halifax, N.S., and was successively clerk in Audit office, telegraph auditor, train despatcher and secretary to the Superintendent. After the amalgamation of the Nova Scotia Ry. with the Intercolonial Ry., he was clerk in the General Freight Agent's office, Moncton, and was subsequently freight agent and accountant at Halifax station. He was appointed acting agent at Halifax, July 1, 1894; Divisional Freight Agent, Northern Division, Oct. 19, 1898, and General Freight Agent, Sept 1, 1907.

J. H. Morley, who died in Winnipeg Dec. 13, aged 44, of paralysis, was formerly in the railway service and was well known to the older railway men. He commenced his railway service as assistant to T. W. Jones, ticket agent of the old Great Western Ry. on York St., Toronto, and then went to the Erie Rd.'s passenger department in Buffalo. From 1882 to 1892 he was Canadian Passenger Agent of the Chicago and Northwestern Ry. at Toronto, and then General Passenger Agent of the Richelieu and Ontario Navigation Co. at Montreal for about two years, afterwards going into real estate business in Montreal. In 1902 he removed to Winnipeg, where he also engaged in real estate business. He was buried in Toronto, where his brother, F. G. Morley, is Secretary of the Board of Trade.

Sir W. Thompson, Baron Kelvin, the well-known electrical scientist, died Dec. 17, aged 83. Of the great many inventions associated with his name, perhaps the mariners' compass may be placed first, though his mechanism for deep sea sounding, mirror galvanometer and syphon recorder for submarine telegraphy, are also of considerable importance to mariners generally. Lord Kelvin acted as electrician for the Atlantic cable from 1857 to 1866, on the successful completion of which he was knighted, and for the French Atlantic cable in 1869; the Brazilian-River Plate cable, 1873; West Indies cable, 1875; and the Mackay Atlantic cables in 1879. For his services in the interests of science, he was created a peer in 1892. He visited Canada in 1897 with the members of the British Association, of which he was President.

R. R. Jamieson, who has been appointed General Superintendent Central Division, C.P.R., Winnipeg, was born at Westover, Ont., Dec. 12, 1856, and entered railway service 1873, his record being: 1873 to 1874, telegraph operator Great Western Ry.; 1874 to 1878, telegraph operator G.T.R.; 1878 to 1880, on construction in Indiana with the Delphi and Chicago Ry.; 1880 to 1883, agent and train dispatcher Credit Valley Ry.; 1883 to 1884, on construction C.P.R. in the Northwest Territories; 1884 to 1890, train dispatcher C.P.R., Toronto; 1890 to 1892, Assistant Superintendent C.P.R., Toronto; 1892 to 1896, Assistant Superintendent C.P.R., Smith's Falls, Ont.; 1896 to 1902, Superintendent C.P.R., Farnham, Que.; 1902 to 1903, Superintendent, C.P.R. Cranbrook, B.C.; 1903 to Dec., 1907, General Superintendent C.P.R., Calgary, Alta.

L. O. Armstrong, who has been appointed Industrial Agent, C.P.R., Montreal, is a son of a former Chief Justice of St. Lucia and Tobago Islands, in the West Indies, but was born in Canada, where the family came with the U.E. Loyalists in 1783, settling first at Gaspe, and subsequently moving to Lake Brandon, Que. Mr. Armstrong entered railway service in May, 1868, with the Ohio and Mississippi Rd., and in 1880 was appointed Land Commissioner for the Manitoba South-Western Rd. On this line being acquired by the C.P.R. in 1881, was appointed right-of-way agent for that company, becoming colonization agent in 1883. This position he retained to the date of his present appointment, the duties of tourist and sportsmen agent being added in 1902. It is proposed that he now be relieved gradually of the duties respecting colonization, tourists and sportsmen, so as to devote his entire attention to industrial matters.

Alfred Price, who has been appointed General Superintendent, Western Division, C.P.R., at Calgary, Alta., was born in Toronto, Dec. 6, 1861, and entered railway service Sept., 1879, since which he has been consecutively to 1881, operator, messenger and clerk Credit Valley Ry.; 1881 to 1882, car accountant, same road, Toronto; 1882 to 1884, operator and relief dispatcher C.P.R., Toronto; 1884 to July, 1888, train dispatcher, same road, Toronto; July, 1888, to May, 1896, car distributor, same road, Toronto; May, 1896, to Aug., 1898, car distributor and Chief Train Dispatcher, same road, Toronto; Aug., 1898, to May, 1901, Superintendent, same road, Toronto; May, 1901, to Sept., 1902, Superintendent districts 8 and 9, same road, Toronto; Sept., 1902, to May, 1903, Superintendent districts 10 and 11, same road, Toronto; May, 1903, to 1905, Superintendent, same road, Fort William, Ont.; 1905, to Feb., 1907, Superintendent of Transportation, C.P.R. Western Lines, Winnipeg; Feb. to Dec., 1907, General Superintendent Central Division, C.P.R., Winnipeg.

D. Blythe Hanna, whose portrait appears on the first page of this issue, was born Dec. 20, 1858, at Thornliebank, Renfrewshire, Scotland, and his railway service is as follows: 1874 to 1879, clerk and ticket agent with the Glasgow, Barrhead and Kilmarnock Ry. of Scotland, at Kinnishead, Pollokshaws and Barrhead stations; 1879 to 1882, cashier, Stobcross station, Glasgow, Caledonian Ry. of Scotland; 1882 to 1884, clerk in Auditor's office, and Travelling Auditor, G.T.R., Montreal; 1884 to 1886, clerk General Auditor's office, New York, West Shore & Buffalo Ry., at New York, N.Y.; 1886 to 1892, Chief Accountant, Manitoba & North-Western Ry., at Winnipeg; 1892 to 1896, Treasurer, and 1893 to 1896, also Land Commissioner, same road; 1896 to Nov., 1902, General Superintendent Lake Manitoba Ry. and Canal Co., and Canadian Northern Ry., Winnipeg; Nov., 1902, to date, Third Vice-President Canadian Northern Ry., Toronto. He is also President of the Canadian Northern Quebec Ry., Quebec and Lake St. John Ry., Third Vice-President Halifax and Southwestern Ry., and Canadian Northern Ontario Ry., and a director of the Winnipeg Electric Ry., Western Canada Flour Mills Co., British America Assurance Co., Western Assurance Co., Manufacturers Life Assurance Co., and London and Canadian Loan and Agency Co.

R. F. Tate, resident engineer for Mackenzie, Mann & Co., Limited, died somewhat unexpectedly at the Western Hospital, Toronto, Nov. 28, from blood-poisoning, following an operation for a tumorous growth on the shoulder. The operation was performed Nov. 16, and Mr. Tate appeared to be getting on very well for about the first week, when symptoms of blood-poisoning set in, and he was removed to the hospital, where he died on the morning of Nov. 28, aged 52. He was a son of the late J. W. Tate, who was an engineer in charge of construction on the G.T.R. in the vicinity of Belleville. He entered railway service as rodman on surveys and construction of the Midland Ry., now part of the G.T.R., and was Chief Engineer for five years ending 1881. He was subsequently resident engineer in charge of double-track construction and a branch to the Sarnia tunnel for the G.T.R., and was with the C.P.R. during the construction of the line between Farnham, Que., and Mattawamkeag, Me.; the Smith's Falls extension in Ont., and the Crow's Nest Pass Line, as well as being engaged on survey and other work. In 1900 he went to Mackenzie, Mann & Co., Ltd., as resident engineer, and remained with that company until his death. He was First Vice-President Engineers' Club of Toronto, 1904-05, and President in 1905-06.

W. P. Chapman, who has been appointed Resident Engineer for Mackenzie, Mann & Co., Ltd., at Toronto, was born at Abbotsley, Huntingdonshire, Eng., Mar. 9, 1857, and educated at Bedford County College. He came to Canada in 1882, and entered railway service in 1883, since when his record has been: 1883 to 1885, rodman, Ontario and Quebec Ry.; 1885-86, rodman and subsequently assistant engineer on construction, Northern and Pacific Jct. Ry.; 1886 to 1887, assistant engineer in charge of construction, C.P.R., London, Ont.; 1887-88, assistant engineer in charge of section location and construction of Guelph Jct. Ry.; Aug., 1888, to 1889, assistant engineer, permanent way, north and north-west divisions, G.T.R., Toronto; 1889-92, same position, G.T.R., Allandale; 1892-96, assistant engineer, permanent way, Great Western Division, G.T.R., Hamilton, Ont.; 1896-97, assistant engineer in charge of maintenance and engineering expenditure, Northern Division, G.T.R., Allandale, Ont.; 1897-1905, assistant engineer in charge of permanent bridge renewals, etc., in Ontario west of Toronto; this included the renewal of the International Bridge, Fort Erie (1900-01), rebuilding of Jordan Viaduct (1901-02); 1905-06, division engineer James Bay Ry., Parry Sound, Ont.; 1906-07, engineer in charge of construction for Province of Quebec, Mackenzie, Mann & Co.'s railway system, and latterly maintenance engineer at Montreal.

D. I. Roberts, who has been appointed General Canadian Freight and Passenger Agent Delaware and Hudson Co., Montreal, was born at Waynesburg, Pa., June 27, 1853, and entered railway service April, 1873, since which his record has been: April, 1873, to Mar., 1874, clerk General Freight Agent's office, Pittsburg, Cincinnati and St. Louis Rd., Pittsburg, Pa.; Mar., 1874, to Feb., 1876, chief clerk car service department, same road; July to Oct., 1877, travelling freight agent, same road; Oct., 1877, to June, 1884, freight and ticket agent, same road, at Washington, Pa.; June, 1884, to May, 1885, travelling passenger agent,

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OF COBOURG, LIMITED

MODERN HIGH-CLASS
ROLLING STOCK
Passenger, Freight and Electric Railway
Ruggles' Rotary Snow Plows
Car Castings, Forgings and Repair Parts

WE ARE BUILDING THE RAILWAY SHOPS
For Intercolonial Ry. entirely in
REINFORCED CONCRETE

STEEL CONCRETE COMPANY LIMITED
E. A. WALLBERG, Pres't Merchants' Bank Building, MONTREAL

ROYAL MAIL TRAINS VIA
INTERCOLONIAL RAILWAY
CANADA'S FAMOUS TRAIN
THE MARITIME EXPRESS

Leaving Montreal 12 noon Fridays, carries the European mail and lands passengers, baggage, etc., at the steamer's side, Halifax, avoiding any extra transfer, the following Saturday.
When inward mail steamers at Halifax do not connect with the regular train, the Maritime Express, westbound, special train, with through sleeping and dining cars attached, for passengers, baggage and mail, will leave Halifax for Quebec and Montreal, connecting with trains for Ottawa, Toronto and all points west.

For further particulars apply to TORONTO OFFICE, 51 KING STREET EAST

Pennsylvania lines; May, 1885, to April, 1886, District Passenger Agent, Pittsburg, Cincinnati and St. Louis Rd., and Chicago, St. Louis and Pittsburg Rd., Columbus, Ohio; April, 1886, to Oct., 1890, Assistant General Passenger Agent, Pennsylvania lines west of Pittsburg, at Cincinnati, Ohio; Oct., 1890, to Dec., 1891, Assistant General Passenger Agent, New York, Lake Erie and Western Rd., Chicago, Ill., in charge of all passenger business west of Buffalo and Salamanca, N.Y., including the Chicago and Erie Rd.; Dec. 7, 1891, to 1901, general passenger agent, New York, Lake Erie and Western Rd., and its successor the Erie Rd.; 1901 to 1905, Vice-President Little Kanawha Rd., and President Marietta, Columbus and Cleveland Rd.; from 1905 to the date of present appointment, Mr. Roberts has not been in railway service.

Geo. G. Odell, C.E., who died at Berkeley House, Ryde, Isle of Wight, Dec. 2, was a son of Chas. Odell, a pioneer engineer of Canada. He spent years 1879 to 1887 in the C.P.R. service. The following six years were spent on various engineering works in the U.S., mainly in the Southern States, and he then went to the United States of Colombia, South America, where he was appointed Chief Engineer of the Republic. After spending four years near the equator, he returned to Canada and spent one season on the C.P.R. Crow's Nest Pass branch, and then went to Bogota, Colombia, where he became chief engineer of an English company which had undertaken the construction of a number of the Republic's public works. In Nov., 1900, Mr. Odell married Miss Julia Goodwin, an English woman who was then visiting at the British Legation to Colombia. A year ago while visiting in England he became interested in some Caandian railway projects, and intended to return to Canada in the near future, but just before his proposed departure he and his wife were both stricken with diseases resulting from their long sojourn in the equator's unhealthy climate. After lingering for some eight months, both died within a few days of each other, leaving a daughter aged five. He was a cousin of C. M. Odell, Resident Engineer Dominion Coal Co., and Sydney & Louisburg Ry., Glace Bay N.S. Their fathers, Chas. & Jas. Odell, were both engineers on the G.T.R., C. M. Odell's father having lived in Toronto for a number of years.

* * *

The Canadian Northern Ry. has made a reduction in freight rates on coarse grains, viz., oats and barley, from Manitoba stations to Port Arthur, Ont., to its wheat rates, which means a reduction of from 1c. to 2c. per 100 lbs. For instance, the rate on wheat from Winnipeg to Port Arthur is 10c. per 100 lbs., and the old rate on oats and barley was 12c.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

J. C. McMynn has resigned his connection with Robt. W. Hunt & Co., engineers, Bureau of Inspection, Tests, etc., Chicago, Ill.

The General Electric Review is a monthly magazine, describing and illustrating electrical machinery and appliances, issued by the General Electric Co., Schenectady, N.Y.

The businesses of the late Homer Taylor and John Taylor, both long established in Montreal as merchants in railway materials and supplies, have been united under the name of Taylor and Arnold, the partners being John Taylor and Thos. Arnold.

The Canadian Westinghouse Co., Ltd., has issued circulars nos. 1096, 1130 and 1146, describing its oil switches and circuit breakers, electrostatic volt meters, and electrolytic lightning arresters, with illustrations and diagrams of their use in various systems.

Kilgore-Peteler Co., Minneapolis, Minn., has issued catalogue 5 of its Peteler industrial and mine cars, coal and ore handling machinery, Peteler chilled car wheels and narrow gauge industrial railways. This company is represented in Winnipeg by the Dominion Supply Co.

The Rail Joint Co., which is the sole maker of the base supported rail joints, has been awarded the contract for the supply of rail joints for the Panama Rd., which is to connect the two oceans by rail across the isthmus. It is estimated that the rail joints supplied by the company to all parts is sufficient to equip a railway which would more than encircle the globe.

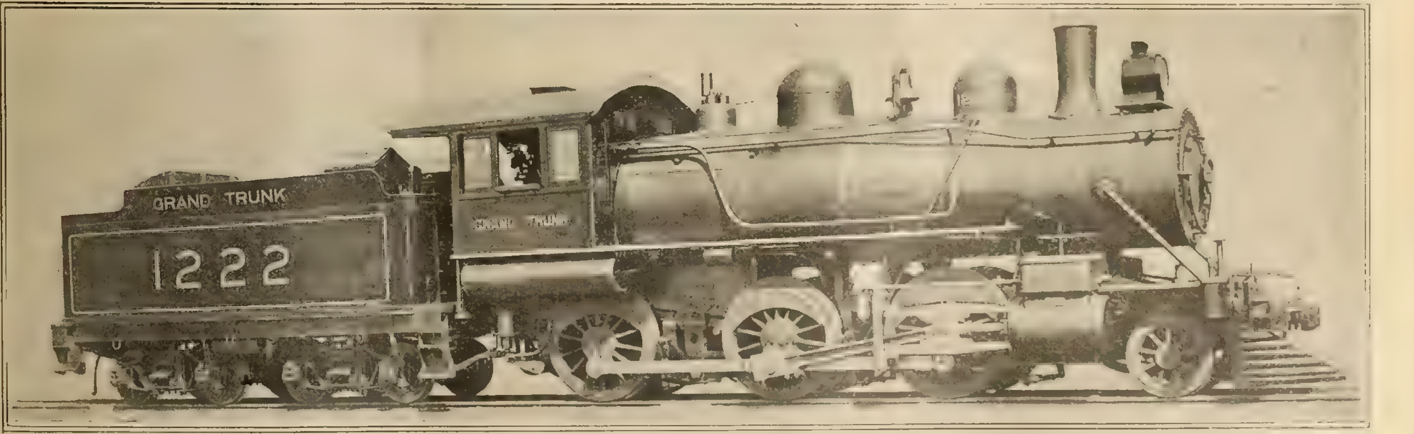
The Inverness Ry. and Coal Co. recently welded by the Thermit process the heavy steel frame of a locomotive which was in its shops at Inverness, N.S., for repairs, the work being done under the superintendence of D. Bell, foreman of the Dominion Coal Co.'s foundry at Glace Bay, N.S., that company using the process for repairing machinery. W. Abbott, Montreal, is agent for the process.

The B. Greening Wire Co. has issued its calendar for 1908, which contains an illustration of the company's works at Hamilton, Ont. A new weaving mill, 260 by 130 ft., and a new warehouse were added in 1907. The company has not issued a new general catalogue during the year, but has separate catalogues for each branch of its business, such as wire rope, wire cloth, perforated metals.

G.T.R. Mogul Locomotives.

The G.T.R. received recently 15 Mogul type locomotives, which were built by the Baldwin Locomotive Works, Philadelphia, Pa., to drawings furnished by the railway company. These engines can exert a tractive power of 28,070 lbs. Four similar locomotiyes have also been built for the Detroit and Toledo Shore Line. These locomotives are examples of a type which, for many years, has been doing efficient work in freight service. The design is compact and readily accessible, and a large proportion of the total weight available for adhesion. For general freight service, where the demands for steam are not too exacting, the Mogul type is particularly suitable. The cylinders are single expansion, equipped with balanced slide valves. Link motion is employed, and the rock shafts are connected directly to the link blocks. Cast steel is used for the engine frames, crossheads, driving-boxes, and main wheel centres. The front and back wheel centres are of cast iron, as are also the crosshead shoes, which are tinned. The guides are of the two bar type, of wrought iron, case hardened. The equalization system is arranged with all springs underhung. The equalizing beams and frame supports rest directly on top of the springs, and are held in place by pins. The forward equalizing beam rests directly on top of a transverse equalizer, which is carried on the forward driving springs. The boiler is of the wagon top type with a relatively long fire-box and short tubes. The longitudinal seams in the barrel are butt-jointed and sextuple-riveted. The fire-box is radially stayed, and a sufficiently deep throat is obtained by sloping the engine frames downward between the main and rear driving-wheels. The principal features of the design are shown in the accompanying illustration. The general specifications are as follows:

Cylinder	20 x 26 ins.
Valve	Balanced.
BOILER.—Type	Wagon top.
" Material	Steel.
" Diameter	62 ins
" Thickness of sheets	21/32 ins.
" Working pressure	200 lbs.
" Fuel	Soft coal.
" Staying	Radial.
FIRE-BOX.—Material	Steel.
" Length	120 ins
" Width	40⅛ ins.
" Depth, front	76¾ ins.
" Depth, back	65 ins.
" Thickness of sheets, sides	5/16 in.
" " " back	⅜ in.
" " " crown	⅜ in.
" " " tube	½ in.
WATER SPACE.—Front	4 ins.
" Sides	3½ ins.
" Back	4 ins.
TUBES.—Material	Iron.
" Thickness	⅛ in.
" Number	283.
" Diameter	2 ins.
" Length	11 ft. 11 ins.



MOGUL LOCOMOTIVE BUILT FOR GRAND TRUNK RY. BY BALDWIN LOCOMOTIVE WORKS.

MONTREAL STEEL WORKS LIMITED

Works: Canal Bank, Point St. Charles, Montreal
Office: 60 St. Patrick St., Point St. Charles, Montreal

MANUFACTURERS OF **STEEL CASTINGS**
(ACID OPEN HEARTH SYSTEM)

SWITCHES AND TRACK WORK
FOR STEAM AND ELECTRIC ROADS

SPRINGS OF ALL KINDS

MANGANESE STEEL CASTINGS
For wearing Parts, Insuring Great Hardness and Durability

INTERLOCKING PLANTS

TRUCKS FOR ELECTRIC CARS

CATALOGUE WILL BE SENT ON APPLICATION

DOMINION IRON AND STEEL CO.
LIMITED

MANUFACTURERS OF

BASIC OPEN HEARTH STEEL RAILS

Order Books are now open for delivery during 1908. Intending Purchasers should place orders early to insure prompt delivery.

HEAD OFFICE AND WORKS: **SYDNEY, CAPE BRETON, CANADA**

THE BEST ACCESS TO THEM ALL IS BY CANADIAN NORTHERN LINES

MUSKOKA
THE MAGANATAWAN
LAKE ST. JOHN
THE SAGUENAY
NOVA SCOTIA SOUTH SHORE
KAKABEKA
THE SUPERIOR DIVIDE
THE SASKATCHEWAN
THE ATHABASCA

¶ Anticipation is almost as pleasurable as realization.

¶ This winter you can enjoy next summer's holiday, if you know where you want to go.

¶ Canadian Northern Lines are opening up a great deal of new holiday territory.

¶ Lake Muskoka is crossed by the Canadian Northern Ontario at Bala Park. The trains are run on the pier at Lake Joseph. There are stations on Sparrow Lake and the Severn River.

¶ Next year the line from Parry Sound to Sudbury will be opened. It enters delightful boating, fishing and hunting country, and crosses the Maganatawan, Still, Key and French Rivers.

¶ The Canadian Northern Quebec traverses the best sporting country in that ancient province. The Quebec & Lake St. John, also a Canadian Northern line, reaches Lake St. John, the home of the ouananiche, and the famous Saguenay River.

¶ The South Coast of Nova Scotia, skirted by the Halifax and South Western Railway, is the best possible refuge from summer heat, and its waters furnish the finest salt and fresh water fishing, as well as the safest sailing.

¶ Between Port Arthur and Winnipeg the Canadian Northern follows the historic and picturesque Dawson route to the prairies through the West Ontario Lakelands. Fort Frances and Rainy River are delightful localities. The Lake of the Woods is a few miles' pleasant sail from Rainy River station. Around Banning there is magnificent fishing and hunting.

¶ The Western Provinces are always full of interest for the traveller. North and West of Edmonton, and beyond the Saskatchewan River generally, are ideal regions for the searcher after change from long-accustomed conditions.

¶ Enquire of any of the following: Winnipeg—G. H. Shaw, Scott Building, Main St.; Toronto—Wm. Phillips, Canadian Northern Building; Montreal—Guy Tombs, Canadian Northern Quebec Offices, St. James St.; Quebec—Alex. Hardy, Quebec and Lake St. John Railway Offices; Halifax—P. Mooney, 124 Hollis St.; St. Paul—R. Creelman, 166 East Third St.

HEATING SURFACE.—Fire-box	188.1 sq. ft.
" " Tubes	1,753.3 sq. ft.
" " Total	1,941.4 sq. ft.
" " Grate Area	33.43 sq. ft.
DRIVING WHEELS.—Diameter, outside,	63 ins.
" " " centre	56 ins.
" " Journals	9½ ins. x 12 ins.
ENGINE TRUCK WHEELS.—Diameter	38 ins.
" " Journals	6½ x 10½ ins.
WHEEL BASE.—Driving	15 ft. 8 ins.
" " Rigid	15 ft. 8 ins.
" " Total engine	24 ft. 3 ins.
" " Total engine and tender	51 ft. 1 in.
WEIGHT.—On driving wheels	146,260 lbs.
On truck	22,900 lbs.
Total engine	169,160 lbs.
Total engine and tender, about	290,000 lbs.
TENDER.—Wheels, number	8.
" " diameter	34 ins.
" Journals	5½ x 10 ins.
" Tank capacity	6,000 gals.
" Fuel capacity	10 tons.
" Service	Freight.

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G.T.R. Betterments, Construction, Etc.

Maintenance of Way.—Press reports stated that at a conference of heads of departments connected with the maintenance of way department held at Toronto, Dec. 2, the question of improving the roadbed was discussed, and added that under the direction of M. S. Blaiklock, Engineer of Maintenance of Way, the company intended during the coming summer to spend a large amount of money on improvements to the roadbed. We are advised that the improvements for 1908 was not the subject under discussion at the recent meeting held in Toronto.

Montreal Track Elevation.—At a meeting of the level crossings committee of the Montreal City Council held Dec. 12, W. Wainwright, Fourth Vice-President, G.T.R., stated that the company had plans in hand for a complete reorganization of the passenger tracks at Bonaventure station, and was only awaiting the outcome of the negotiations on the level crossings question before proceeding to carry them out. A letter was read from the company stating that the elevation of the tracks for passenger service and freight station and tracks would bring the cost of the work to an amount which would really make the same impracticable, and, therefore, the company would be glad to have the committee consider whether it would be not more desirable to leave the tracks on the level of such streets as are necessary to approach the freight stations and passenger yard, and to take care of the intersecting streets by means of viaducts. The idea of the company is that the tracks elevated from the city limits shall proceed down an incline to the level as from Guy St. to the Bonaventure station. After some discussion it was agreed that one or two engineers to be appointed by the council should meet representatives of the company and prepare plans for getting rid of level crossings in the city, either by elevated or underground tracks, and submit the same by Mar. 1.

Freight Terminals at St. Lambert.—We are advised that the company has secured a strip of land about 400 ft. wide and two miles long, on the north side of the right-of-way at St. Lambert, Que., to be used for putting in sorting and switching yards, work upon which will be begun as soon as the weather will permit in the spring. The matter came before the Board of Railway Commissioners at a sitting at St. Lambert Dec. 9, at which considerable opposition was manifested to the company's plans. It was contended that the yards and sidings would destroy the best residential section of the town. The Commissioners viewed the site of the proposed yard, and reserved judgment.

Car Shops for Barrie.—A deputation from Barrie, Ont., has been informed that by including all G.T.R. property, present and to be acquired, in a fixed assessment of $35,000, the company will erect car repair shops for the Northern Division there. Information was promised as to the size of the shops and the number of men to be employed, to enable the council to reach a decision.

Port Huron Shops.—Plans are being prepared for the erection of some additional buildings at the locomotive shops at Port Huron, Mich. At the car shops good progress is being made with the new buildings. The second of the new structures, 40 by 400 ft., it is expected will be started early in Jan.

Kalamazoo, Mich.—Land has been purchased at Kalamazoo, Mich., for terminals, and it is stated that a branch from the main line will be constructed in the spring to connect it up. Another report states that the Chicago and Kalamazoo Terminal Ry. has been transferred to the G.T.R., and will be used in connection with the projected branch from the main line to Kalamazoo. (Dec., 1907, pg. 897.)

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National Transcontinental Railway.

The Governor-General in the speech from the throne at the opening of the current session of the Dominion Parliament referred to the construction of this line. He said a gratifying result of the expansion of trade was that the revenue of the last fiscal period of nine months, ended Mar. 30, 1907, was more than sufficient to meet expenses on Consolidated Fund, National Transcontinental Ry. capital and special outlays, all expenses of the Dominion of every kind, and leave a balance of over $3,000,000 to be applied in reduction of the public debt. The difficulty of obtaining labor and materials at a time of great business activity has somewhat retarded the construction of the N.T.R., but notwithstanding that great progress has been made on the Eastern Division and on the Prairie Section of the Western Division under construction by the G.T. Pacific Ry. Co. A section of the latter of about 250 miles has been available for handling the freight traffic of the present season. Contracts for the portion of the Prairie Section west of Edmonton are about to be let, and immediate steps will be taken for the commencement of work at both the eastern and western ends of the Mountain Division. Thus, in a very short time, the whole work from Moncton to the Pacific Ocean will be under vigorous construction.

The report of the Commissioners of the N.T.R. for the year ended June 30, 1906, dated Ottawa, Oct. 9, 1906, has been laid before the House of Commons. A report for the nine months ended Mar. 30, 1907, was laid on the table of the House of Commons Nov. 29. The total expenditure amounts to $5,537,867, of which the Purchasing Department expended $224,880 for supplies. The greater portion of the expenditure was on account of surveys and payments to contractors on progress estimates. The expenses at the headquarters in Ottawa totalled $166,191. The total expenditure from Sept., 1904, to March 31, 1907, was $8,147,494. Of the $224,880 expended on supplies all was spent in Canada, except $1,833 for goods from Great Britain, and $444 for purchases from the U.S.

H. D. Lumsden, Chief Engineer, states that the first location from Moncton, N.B., to St. Boniface, Man., is practically completed, and that 852 miles are under construction. The total distance from Moncton to St. Jean Chrysostome will be 453 miles, a saving of only 34 miles as compared with the Intercolonial Ry. The entire distance to Winnipeg is 1,817, as against 1,890 originally estimated. During the year contracts for supplying 80-lb. steel rails were awarded to the Dominion Iron & Steel Co. and the Algoma Steel Co. at $34 a ton. Spliced bars were ordered from the Nova Scotia Steel Co. for $47.04, from the Hamilton Steel & Iron Co. at $43.68; bolts and nuts from the Toronto Bolt and Forge Co. at $3.60 per 100 lbs., at $3.41 from the Gananoque Forge Co., and at $3.57 from the Montreal Rolling Mills Co.; spikes from the Peck Rolling Mills Co. at $2 50 per 100 lbs., and from the Montreal Rolling Mills, the Toronto Bolt and Forge Co., and the Hamilton Steel Co. at $2.55 per 100 lbs. Tie contracts were awarded to J. G. Hearn, of Quebec, at prices varying from 44 to 50 cents each, and to R. Bates, of Kenora, at 35 and 40 cents. In connection with the supply of ties for the section immediately east of Winnipeg, Mr. Lumsden complained that several tenderers were not able to fulfil their contracts by reason of the refusal of the Ontario Government to grant permits to cut. The price to be paid for bridge superstructures varies from $4.04 to $4.18 per pound to the Locomotive and Machine Co. of Montreal, and $3.95 to $4.23 to the Dominion Bridge Co., Montreal. For the inspection of material and workmanship of bridges, an inspection company was paid at the rate of 45 cents a ton, and for fastenings at 20 cents a ton. The inspection of rails costs 5 cents a ton.

The reports of the district engineers are appended. G. C. Dunn, Fredericton, N.B., expresses the opinion that the selection of the Central route through New Brunswick will mean the passenger time between Quebec and Moncton about an hour and for freight train two hours less than the time which would have been required if the river route had been selected. A. E. Doucet, Quebec, reports that good progress is being made with construction work. At the close of March the contractors had 3,297 men at work.

A. N. Molesworth reports that on section C there has been good progress on surveys as far as the Gatineau River, and S. R. Poulin of district D states that his surveys have been nearly completed. On district E, which runs to the height of land, Engineer Armstrong reports good country. There will be 36 bridges on this section. A. E. Hodgins, who had supervision of the section west of Superior Jct., reports that the contractors have been embarrassed by scarcity of labor, but that the sub-letting of contract by J. D. McArthur, Ltd., has had beneficial results. There has been trouble with illicit whiskey sellers. Seventeen men have been killed and 26 injured in the work owing to recklessness in handling dynamite.

A return has been ordered by the House of Commons at the request of Mr. Schell, M.P., showing the quantities used by the N.T.R. Commission for arriving at the moneyed values of the tenders for the construction of the 50 miles, more or less, from Moncton westerly; the 62 miles, more or less, from Grand Falls westerly; from the south side of the St. Lawrence River easterly 150 miles; for the 45 miles, more or less, westerly from near La Tuque; and for the 150 miles easterly from near Abitibi; the prices placed opposite the several items by each tenderer, and the total amount so ascertained of each tender.

The final location for the first 12 miles southeasterly from the Quebec Bridge has been definitely decided upon, and a plan, together with a book of reference, has been deposited with the Registrar of Deeds for the County of Levis. The line has already been fenced and considerable trestle work and excavating done. Operations have ceased for the season.

Replying to a question in the House of Commons Dec. 4, the Minister of Railways stated that 800 miles of the G.T. Pacific Ry. were under construction west of Winnipeg, but there was no construction west of

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Edmonton. East of Winnipeg there were 860 miles under construction. The estimated cost of grading, tracklaying and ballasting, including cost of ties and rails, on the portions let between Winnipeg and Edmonton, was $18,400,000; between Edmonton and the coast $60,700,000; and between Winnipeg and Moncton, $41,946,258; this amount includes engineering and contingencies. The mileage from Moncton to Winnipeg was 1,807.4; from Winnipeg to Edmonton, 800; and from Edmonton to the coast, 940 miles. The mileage from Edmonton to the coast has not been submitted to the Department by the G.T. Pacific Ry., so that the mileage on that section is approximate, being merely from the preliminary surveys.

GRAND TRUNK PACIFIC RY.

The annual meeting of shareholders was held in Montreal Dec. 5, having been adjourned from the third Wednesday in Sept., the official date for holding the meeting. The directors elected are: Sir C. Rivers Wilson, A. W. Smithers, Lord Welby, J. A. Clutten-Brock, Sir W. L. Young, representing the G.T.R., the three latter taking the place of Col. Firebrace, Sir H. M. Jackson, and Hon. C. Rothschild, it being the practice of the G.T.R. directors to serve in rotation on the G.T. Pacific Ry. Board. C. M. Hays, F. W. Morse, W. Wainwright, E. H. Fitzhugh, W. H. Biggar, H. A. Allan, E. B. Greenshields, Hon. G. A. Cox, E. R. Wood, J. R. Booth, are the Canadian directors. The report of the directors, which is stated to have been made for the purpose of record and not for public distribution, showed that there were 994 miles of line under contract, the construction of which is in charge of the company. This embraces the line from Winnipeg to Edmonton, and also the Lake Superior branch. On the main line of the Eastern Division there is at present 846 miles under contract, the construction of which is in charge of the National Transcontinental Ry. Commissioners, making a total mileage under contract of 1,840 miles, on all of which construction is in progress. Tracklaying is proceeding on the Prairie Section from Portage la Prairie westerly to about 280 miles, and easterly from Saskatoon, and it is expected that the rails will be laid between these two points during the winter. The grading is very nearly completed from Winnipeg as far west as Edmonton, and the season of 1908 will in all probability see this section completed. The authorized mileage of the company for its main line and branches was stated by the President to be approximately 7,900 miles.

The substructure of the bridge across the South Saskatchewan River at Saskatoon is completed and the steel superstructure is now being erected, which, it is expected, will be completed so that tracklaying can proceed from Saskatoon westerly 200 miles to Battle River with the opening of the work next spring, the grading over this portion of the line being now completed. At the latter point a large bridge across Battle River is under construction. This point is 118 miles east of Edmonton, to which place construction will also be prosecuted vigorously next season. Tenders have been asked for the construction of additional mileage from Edmonton westerly about 120 miles. Over such portions of the line as have now been constructed every facility is being extended for the accommodation of the farmers and settlers living along the line that is practicable during construction of the railway prior to its official opening.

The officers of the company were reelected as follows: President, C. M. Hays; Vice-President and General Manager, F. W. Morse; Second Vice-President, W. Wainwright; Secretary, H. Phillips.

F. W. Morse, Vice-President and General Manager, returned to Montreal Nov. 28, after a three months' trip over the lines under construction west of Winnipeg. He said in an interview that he was thoroughly satisfied with the progress that was being made with construction at different points. The company had no reason to be disappointed with the results so far obtained.

The grading into Saskatoon, Sask., was completed Nov. 25. Tracklaying from the Portage la Prairie end is being carried on, but was suspended, Dec. 9, by the gang working easterly from Saskatoon. At the time of the suspension of work, steel had been laid for 55 miles. It was stated that the cause for the suspension of work was the shortage of material

Tenders have been asked for the supply of 600,000 ties to be delivered at various points during the winter between Saskatoon and Edmonton. Tenders have also been asked for the grading of 120 miles westerly from Edmonton, and it is expected to call for tenders during the winter for the other 125 miles necessary to carry the line to the Yellow Head Pass.

We are advised that the progress of the work upon the location of the G.T. Pacific Ry. in British Columbia is still at a stage where it is considered advisable to keep the information as the private property of the company, consequently recent press reports purporting to give the route decided upon west of the Yellow Head Pass are in no way to be accepted as definite. One of the papers mentioning the route referred to G. O. Leask as the Assistant Chief Engineer of the company. We are advised that Mr. Leask is one of the company's locating engineers.

J. W. Stewart, of Foley Bros. and Larson, states that good progress is being made by the firm on its contract for the line between Kitimaat and Kitsilas Canyon, B.C., 45 miles.

Contracts are reported to have been let for the clearing of 2,000 acres of land at Prince Rupert for the company. The contract price is said to be $220,000.

The G.T. Pacific Branch Lines Co. will apply at the current session of the Dominion Parliament for an act extending the time for the construction of the various lines which it is authorized to lay out and operate as branch lines of the G.T. Pacific Ry., on the Eastern as well as on the Western Division. (Dec., 1907, pg. 907.)

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The Reid-Newfoundland Co.'s Case.

In the charge laid against the company by the Attorney-General of Newfoundland, it was set forth that the company, as contractor for the operation of the Newfoundland Ry. was, and now is, under the obligation to furnish to the Newfoundland Colonial Secretary half-yearly returns for the three years prior to Jan. 4, 1907, of (a) goods inward; (b) goods outward; and (c) passengers inward and outward, at Blaketown Siding on the Newfoundland Ry. The company denied that it is under any obligation to furnish such returns. The judgment, as delivered by Chief Justice Horwood, is as follows:

"Sec. 21 of the Act of 1901, c. 6, entitled 'An Act to amend the Newfoundland Railway Act, 1898, and for other purposes,' provides that the contractor shall annually prepare, to be furnished to the Colonial Secretary, returns in accordance with schedule E to the Act, showing his capital, traffic and working expenditure; with other information indicated in the schedule. Such annual returns relate to the 12 months previous to June 30 each year. Par. 4, s. 21, is as follows: '(4) The contractor shall also, in addition to the information required to be furnished to the Colonial Secretary as indicated in said schedule E, furnish such other information and returns as are, from time to time, required by the Colonial Secretary.' The section further provides that if the contractor makes default in furnishing returns in accordance with the section, he incurs a penalty not exceeding $10 for every day during which such default continues. The usual returns up to the end of June, 1906, having been furnished, the Colonial Secretary on Jan. 4, 1907, required the defendants to furnish 'half-yearly returns' for the three years then past of (a) goods inward; (b) goods outward; (c) passengers inward and outward at Blaketown Siding on the Newfoundland Ry. On Jan. 8, the defendants refused then to make such returns, and have not since made them. In these circumstances the Attorney-General claims the penalty. The defendants contend (a) that the information shows no cause of action; and (b) that they were not, on Jan. 4, or at any other time, under obligation to furnish the returns demanded. No witnesses were called, but correspondence between the Government and the defendant company was put in; and we are left to determine, on a proper construction of the Act, whether the contention of the Attorney-General or that of the company is correct. In this proceeding for a penalty, the onus of establishing the affirmative lies strictly on the plaintiff. The questions for determination are: Has the company failed in any duty created by this Act? Was it incumbent on it at the time claimed in the information, to furnish these half-yearly returns for the three years preceding Jan. 4, 1907? The primary object of s. 21 is that the contractor shall prepare annual returns, to be furnished in duplicate before the end of Sept. each year. It proceeds to provide that other information in addition to, but ejusdem generis with that indicated in schedule E, may from time to time be asked for. The Imperial Acts 34 and 35 Vict., c. 78, and the Railway and Canal Traffic Act of 1898, (s. 32), out of which c. 6 was drafted, are instructive in the consideration of the present case. Cap. 6 omits to provide power to the Government to alter the periods at which returns are to be furnished, a power expressly given to the Board of Trade by the Imperial Act of 1888. Our statute does not declare that the additional information shall be furnished from time to time when called for. The phrase 'from time to time require' is to be read as meaning that the Colonial Secretary shall not be limited in the number of his demands. We construe the section as requiring that the additional information is to be supplied with the next annual returns." Judgment was therefore entered for the company.

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After several conferences the G.T.R. yardmen and switchmen at points between Portland, Me., and Detroit, Mich., have been granted an increase of pay to the extent of 12%. The men asked for advances varying from 15 to 20%.

The following resolution was recently moved in the Dominion House of Commons, relative to the Government Railways: "That in the opinion of this house, the names Intercolonial Railway and Prince Edward Island Railway should be dropped and the name Interprovincial Railway substituted therefor; that the government system of railways should be considered as one entity in the keeping of accounts and in all other respects; that the ferry service across the Northumberland straits should be owned and managed by the Railway Department, winter and summer, as the ferry service across the Canso straits is now, and as the ferry service across the Georgia straits is owned and managed by the C.P.R."

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Railway Commissioners' Rate Order.

4062. Nov. 4, 1907.—The complaint of A. McDonald & Son, Alexandria, Ont., coal merchants, under sec. 315 of the Railway Act, for an order directing the G.T.R. Co. to grant fair and equitable rates to stations upon its Canada Atlantic branch between Rouse's Point, N.Y.; Cecile Jct., Que., and Massena Springs, N.Y., as the points of shipment, and all intermediate stations to Eastman's Springs, Rockland and Hawkesbury, upon the C. A. branch, as the points of destination. Upon hearing counsel for the complainants and the G.T.R., the evidence adduced and what was alleged, and upon the report of its Chief Traffic Officer, the Board orders that the G.T.R. is hereby directed to reduce its rate from Rouse's Point to Coteau Jct. and St. Polycarpe, on its Canada Atlantic branch, to 80c. per gross ton on anthracite coal and 70c. per gross ton on bituminous coal, the said reduced rates to become effective not later than Feb. 1, 1908

ROOFING PAPER FROM MERRITTON, ONT.

3951. Nov. 21. In the matter of the application of the Riordon Paper Mills, Ltd., under sec. 323 of the Railway Act, for an order directing the G.T.R. Co. to issue a supplement to its tariff C.R.C. no. E-425, making the rate on roofing paper, unfinished carloads, Merritton to Montreal, 17½c. per 100 lbs., upon the report of the Chief Traffic Officer of the Board and the consent of the G.T.R., it is ordered that the G.T.R. be, and is hereby directed to change its said tariff so that the tolls to be charged upon the class of paper covered by that tariff, for carriage from Merritton, St. Catharines, or Thorold, to Montreal, shall not be greater than the rates charged under such tariff for carriage from Brantford to Montreal. That in any future change of tariffs upon such paper, the rates for carriage from Merritton, St. Catharines and Thorold to Montreal, shall not be greater than those to be charged from Brantford to Montreal. That the new rates provided for in this order come into force not later than Nov. 28, 1907.

INTERNATIONAL AND TORONTO BOARD OF TRADE CASES.

4125. Dec. 18.—In the matter of the application of the Canadian Manufacturers' Association and the shippers, who were heard and represented at the hearings held by the Board in Windsor and Chatham, Ont., in May, 1906, and of the Toronto Board of Trade. Upon reading letters dated Dec. 16 and 18, 1907, addressed to the Secretary of the Board by W. R. MacInnes, Chairman of the Advisory Committee of the Canadian Freight Association, representing the railway companies affected by the order 3258, made July 6, 1907. And upon hearing W. R. MacInnes, Chairman, and R. Foreman, Secretary of the Advisory Committee, representing the railway companies. The Board orders that its order 3258, of July 6, 1907, be amended by rescinding par. 1: "Provided that the adoption by the said railway companies, or any of them, of rates or tolls for freight traffic from Montreal westbound equal to those required by the said order to be adopted in the reverse direction to Montreal, and the issue and putting in force of tariffs thereof, shall not prejudice the said railway companies, or any of them, upon any application which may be made to the Board by the said railway companies, or any of them, to rescind or vary the said order, or to authorize any change or changes in the rates or tolls required by the said order, or in such rates or tolls from Montreal westbound."

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An interesting paper was read before the Wentworth Historical Society, by Miss Gilkinson, Brantford, on the inauguration of the Great Western Ry in 1854.

Railway Rolling Stock Notes.

The Crossen Car Mfg. Co., of Cobourg, Ont., has delivered recently a first-class passenger coach to the Central Ontario Ry., and is shipping box cars to the Intercolonial Ry.

The Duluth, South Shore and Atlantic Ry. was reported recently to be about to place an order for 1 baggage car, 3 second-class passenger coaches and 1 first-class passenger coach.

The Quebec Ry., Light and Power Co. has recently received 25 flat cars, 40,000 lbs. capacity, from a Canadian builder, and has placed an order for 30 flat cars of similar capacity for delivery in April.

The G.T.R. between Nov. 15 and Dec. 15 received the following additions to rolling stock: 8 compound consolidation engines, 8 first-class passenger coaches, 2 second-class passenger coaches, 5 baggage and express cars, and 10 caboose cars.

The Canadian Northern Ry. between Nov. 15 and Dec. 15 placed orders for the following rolling stock: fifty 50-ton steel ore cars, with the Dominion Car and Foundry Co., Montreal and 500 30-ton box cars, with Rhodes, Curry & Co., Amherst, N.S.

The Intercolonial Ry. between Nov. 16 and Dec. 18 received the following rolling stock from Rhodes, Curry & Co., Ltd., Amherst, N.S.; 100 platform cars, 80,000 lbs. capacity; 100 box cars, 60,000 lbs. capacity; 5 refrigerator cars, 60,000 capacity, and 2 mail vans.

The Canadian Locomotive Co., of Kingston, Ont., between Oct. 14 and Dec. 14 delivered four 10-wheeled locomotives to the Prince Edward Island Ry., and 6 consolidation engines to the Canadian Northern Ry., and commenced delivery of four 10-wheeled locomotives to the Central Ontario Ry.

The Canadian Northern Ry. between Nov. 15 and Dec. 15 received the following rolling stock: 7 consolidation locomotives, from the Locomotive and Machine Co., Montreal; 3 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.; and 3 mail and express cars from Rhodes, Curry & Co., Amherst, N.S.

The C.P.R. between Nov. 12 and Dec. 17 received the following rolling stock: 270 box cars, 90 refrigerator cars, freight, 8 first-class cars, 8 snowplows, 4 passenger locomotives, from its Angus, Montreal, shops; 13 vans, 1 superintendent's car, from its Farnham, Quebec, shops; and one rotary snowplow from the Locomotive and Machine Co., Ltd., Montreal.

The Canada Car Co., Montreal, between Oct. 14 and Dec. 14, received orders for 1 box car, 36 ft. long, 60,000 lbs. capacity, from the Central Ontario Ry.; 3 vans from the Toronto, Hamilton and Buffalo Ry.; 70 Hart convertible ballast cars from the Intercolonial Ry., and two flat cars, 60,000 lbs. capacity, from F. H. Hopkins & Co., Montreal, for M. P. and J. T. Davis, Quebec.

Two of the Westinghouse single-phase electric locomotives to be used by the St. Clair Tunnel Co. (G.T.R.) in hauling trains through the tunnel between Sarnia, Ont., and Port Huron, Mich., were delivered Dec. 2. The normal capacity of these locomotives is 700 h.p., and it will take two of them to pull a 1,000-ton train up the grade. Five more locomotives were subsequently delivered.

The C.P.R. between Nov. 12 and Dec. 17 placed orders for the following rolling stock: 1 wing snowplow, 6 dining cars, 26 baggage and express cars, 12 mail and express cars, 75 box cars, 35 flat cars, 8 steel coal cars, 1 refrigerator car, freight, 5 refrigerator cars, passenger, 9 stock cars, 2 first-class cars, 2 suburban cars, 4 colonist cars, 1 switching locomotive, at its Angus, Montreal, shops; and 3 vans at its Farnham, Que., shops.

The Canada Foundry Co., Toronto, has received an order from the J. D. McArthur Co., railway contractors, Winnipeg, for a switching locomotive, and three mogul locomotives to the following specifications:

SWITCHING LOCOMOTIVES.

CYLINDERS.—19 ins. diameter; 26 ins. stroke.

DRIVERS.—50 ins. diameter.

TANK CAPACITY.—Water, 5,000 imp. gals.; coal, 8 tons.

WEIGHT.—In working order, on drivers, 130,000 lbs.; of tender, light, 36,000 lbs.

MOGUL LOCOMOTIVES.

CYLINDERS.—19 ins. diameter; 26 ins. stroke.

DRIVERS.—50 ins. diameter

TANK CAPACITY.—Water, 5,000 imp. gals.; coal 8 tons.

WEIGHT.—In working order, on drivers, 115,000 lbs.; total, in working order, 135,000 lbs.; of tender, light, 36,000 lbs.; total of engine and tender, in working order, 233,000 lbs.

WHEEL BASE.—Total of engine, 49 ft., 0½ ins.

The G.T.R. passenger coaches recently added to rolling stock are 67 ft. 6 ins. long over end sills, 9 ft. 6 ins. wide over side sills, with a seating capacity of 75. They are constructed with steel platforms, side vestibules, bottom and end construction being welded iron throughout, and mounted on G.T.R. standard 6-wheeled trucks, equipped with steel tired wheels. The double-sashed windows are of the latest design, with semi-elliptic sash, and opalescent glass. The inside fitting is of mahogany of flush design with inlay lines and ornamentations. The ceilings are decorated in gold, the pattern of the interior gothics being similar to the windows. The high back seats are upholstered in green frieze plush, and the smoke room seats in leather, with accommodation for 14 passengers. The cars are heated with direct steam, and lighted throughout with gas.

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The Canadian Freight Association has asked the Board of Railway Commissioners to approve supplement 1 to Canadian Classification 13.

The Board of Railway Commissioners has ordered that the C.P.R. hold its trains at Brockville, Ont., in order to connect with G.T.R. trains there.

The C.P.R. recently announced that future consignments of freight stored in its warehouses at Fort William, Ont., will be covered by insurance by the company.

W. Hall, who has recently been appointed Superintendent for the electrical operation of the St. Clair Tunnel, was formerly chief engineer of the Canada Car Co., Montreal.

The C.P.R. is replacing acetylene gas with Pintsch gas as a medium of lighting its passenger cars. The tanks under the cars are capable of carrying three days' supply of gas.

The new railway in Guatemala, Central America, constructed by a company in which Sir Wm. C. Van Horne is largely interested, was opened for traffic Nov. 21. The opening day was celebrated as a national holiday.

The G.T.R. has secured a 10-year lease of its present ticket office on the corner of Yonge and King West, Toronto, from Jan., 1908, together with the adjoining store on Yonge St., now occupied as a drug store. It is said the rent is to be $22,500 a year.

Three important passenger meetings will be held at the Clifton House, Niagara Falls, Ont., in Jan. The rate clerks of the Great Lakes and St. Lawrence River Rate Committee and the Niagara Frontier Summer Rate Committee will meet on Jan. 21 and 22, and the general meetings of the committees will be held Jan. 23. The International Water Lines Passenger Association will meet on Jan. 22.

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TORONTO, CANADA, JANUARY, 1908

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Application was recently made to the London (Eng.) Stock Exchange Committee, to allow the Canadian Northern Prairie Lands Co., Ltd., to be placed on the official list for quotation. The company is capitalized at $1,500,000, divided into 300,000 shares of $5 each.

The Saskatchewan Government is organizing a Department of Railways, a section of which will have charge of the telephone lines in the province. S. P. Porter, heretofore Chief Homestead Inspector at Regina, has been appointed Deputy Commissioner of Railways.

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Railway Finance, Meetings, etc.

Boston and Maine Rd.—The New York, New Haven and Hartford Rd. Co. owns directly or indirectly 159,948 shares of the Boston and Maine Rd. stock, and practically controls the line. C. S. Mellin, President, stated, Dec. 11, that an opportunity had presented itself for the disposal of the company's stock in the B. and M. Rd. at a profitable figure. The prospective purchaser has a competitive interest, but the N.Y., N.H. and H. Rd. would be protected by a contract which would preserve relationships. Press reports state that the prospective purchaser is the C.P.R. Sir T. G. Shaughnessy, President C.P.R., declined absolutely to discuss the report, while E. B. Osler, M.P., Toronto, a member of the Executive Committee of the Board, said it was merely a newspaper rumor without any foundation.

Canadian Northern Ry.—Application will be made at the current session of the Dominion Parliament for an act authorizing, in addition to the construction of branch lines referred to on another page, an increase of the capital stock of the company to $19,250,000.

It is understood that among the bills which the Manitoba Government will submit at the forthcoming session of the Legislature, will be one guaranteeing a further issue of bonds of the Canadian Northern Ry. for branch line construction.

Canadian Pacific Ry.—An extraordinary general meeting of the shareholders was held at Montreal Dec. 13, for the purpose of passing a resolution authorizing the directors to issue ordinary capital stock of the company to the amount of $28,320,000, being the balance of the unissued ordinary capital stock heretofore authorized, such issue to be made in such amounts and at such times, according to the requirements of the company, as the directors may determine.

It is estimated that the Province of Alberta will receive $60,000 as revenue from the tax on C.P.R. branch lines in the Province, as provided for in the taxation act passed last session of the Legislature.

Edmonton, Yukon and Pacific Ry.—The Dominion Parliament will be asked at the current session for an act authorizing the issue of bonds, debentures or other securities to the extent of $25,000 a mile in respect of the company's lines already constructed or to be constructed east of the foothills of the Rocky Mountains, and to $35,000 a mile on other portions of the company's line.

Guelph Junction Ry.—The gross earnings for the three months ended Sept. 30 were $12,569.29. Of this the C.P.R. takes 60% for operation of the line, $7,541.58, leaving $5,027.70 to be paid into the Guelph city treasury.

Maritime Coal, Ry. and Power Co.—At a special meeting of shareholders at Montreal, Dec. 7, the directors were authorized to issue new bonds to be exchanged for the old bonds of the companies which are now amalgamated. The last company taken over was the Canada Coal and Rd. Co.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—The C.P.R. is exercising its rights to the purchase of new stock being issued by the M.S.P. and S.S.M.R. Co. Of the $21,000,000 of new stock authorized, $4,200,000 has been issued, and of this the C.P.R. takes $2,142,000. The second instalment of 20% was paid Dec. 2, the remaining instalments of 20% each falling due Feb. 3, April 1 and June 1 respectively.

Quebec and Lake St. John Ry.—A meeting of shareholders was held at Quebec, Dec. 12, for the purpose of authorizing the directors to issue first mortgage bonds to the extent of $20,000 a mile of the Gosford branch of the railway, and on the branch from Roberval station to Roberval wharf.

Quebec Central Ry.—Gross earnings for Oct., $87,454.57; net earnings, $24,922.94; against $76.416.35 gross, and $26,483.13 net for Oct., 1906. Gross earnings for ten months ended Oct. 31, $851,945.46; net earnings, $276,732.26; against $782,290.92 gross, and $291,911.74 net for same period 1906.

Temiscouata Ry.—Traffic receipts: March, $14,364.42; April, $16,495.75; May, $15,228.11; June, $16,843.29; July, $19,824.98; Aug., $18,941.54; Sept., $18,164.39; Oct., $17,388.77

Temiskaming and Northern Ontario Ry.—Gross earnings for Sept., $75,341; operating expenses, $61,097; net earnings, $14,244, against $2,633 for Sept., 1906.

Toronto, Hamilton and Buffalo Ry.—Approximate earnings for Oct., $84,676.16; Nov., $81,054.55; against $69,659.89 for Oct., and $66,300.58 for Nov., 1906.

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The G.T.R. Penny Fare Case.

The Supreme Court of Canada gave judgment Dec. 13 on the G.T.R. Co.'s appeal against the Board of Railway Commissioners' decision, ordering it to give 2c. fares for third-class travel on its line between Montreal and Toronto, on at least one train per day each way. The Chief Justice said the appeal was dismissed for the reasons given by Chief Commissioner Killam in the judgment appealed from. Justice Girouard concurred.

Justice Idington said: "I agree with the reasoning of the learned Chief Commissioner. It seems to me impregnable. I desire to add one or two observations arising out of new ground taken by the appellants. It is claimed before us that the statute 18 Vict., chap. 39, of the late Province of Canada, and not 16 Vict., chap. 37, is to be looked to as the incorporating act of the appellant company. It is said, section 4 of that incorporated the Railway Clauses Consolidation Act as part and parcel of the act of this later incorporation, and thus the special tariff of passenger tolls fixed by 16 Vict., chap. 37, sec. 3, is got rid of. A careful consideration of the whole of 18 Vict., chap. 33, and even sec. 4 thereof relied on itself, does not support this contention. The general scope and purpose of that act was to amalgamate a great many lines with that of the main Grand Trunk line, now in question, and the respective companies owning them with the G.T.R. Co. of Canada, incorporated by 16 Vict., chap. 37, and all are to be called the Grand Trunk Railway Co. of Canada. The old order of things remains, in all other respects, unchanged. There is the old corporate body, the old corporate name, the old main line extended, and all under the same old charter with more new powers and properties, but with the old right to provincial subsidy and the corresponding duty to discharge which was imposed as consideration for granting the subsidy. Again, it is contended here that the Board of Railway Commissioners have, by virtue of the Railway Act of 1903 obtained greater powers over the tolls than had the Governor-in-Council, under the General Railway Clauses Consolidation Act, 14 and 15 Vict., chap. 15, in force when the appellants became incorporated. I think a comparison of sub-sec. 5 of sec. 14 of that act with sec. 251 of the act of 1903 will shew there is not much ground for this contention. Even if clearly so, as I think it is not, what would there be in such a state of things so inconsistent with as to repeal the obligations created by 16 Vict., chap. 39, sec. 3, on which the Board has proceeded to make the order complained of? Still less argument, if possible, as against the order in question, is there in the new powers of the Board over the kind of cars and accommodation generally to be furnished by the company in operating its lines. Is it to be supposed that the company, if free from any supervision whatsoever, would have persisted to the present hour in using only tallow dips, such as obtainable in 1852, and insisted in depriving third-class cars of all the decencies and utilities for preserving some of the decencies of life, in travelling? If such be held by the company to be part of its inalienable right, I fear it cannot maintain that precious right in face of this new statute, but, all the same, I have no doubt the Commissioners can and will, if it become clearly part of their duty to give directions as to third-class cars, properly discriminate between the several classes of cars each class of fare may entitle a passenger to enter. They may possibly improve them all a bit as compared with 1852, without hurting any one or even the company. I think the appeal should be dismissed with costs."

Justice Maclennan said: "After a full and careful consideration of the legislation enacted during the many years which have elapsed since the passing of the special act of 1852, and the reasons and arguments which were addressed to us on behalf of the appellants, I am of opinion that the appellants have failed to shew that the enactment in question has been repealed either expressly or by implication. I agree with the very full statement of reasons for judgment given by the Chief Commissioner of the Railway Board, and cannot usefully add anything thereto. I would dismiss the appeal with costs."

Justice Duff concurred in the reasons stated by Chief Commissioner Killam for the judgment appealed from.

On Dec. 23 the G.T.R. Co. applied to the Railway Commission to postpone the going into effect of its order of July 3 in order to allow time for an appeal to the Imperial Privy Council, and judgment on this application was given by Chief Commissioner Killam on Dec. 26 as follows: "The order in this case was issued without the communication of a draft to the parties. The details were settled by the Board. No time was allowed after the final disposition of an appeal to the Supreme Court for the taking of steps to put the order in force, although the order directed that tariffs should be prepared and filed. Necessarily some period of time is required in order to prepare for the new service. While I do not feel any doubt as to the correctness of my conclusion upon the question of law involved, and while that conclusion has been unanimously affirmed by the Supreme Court of Canada, I cannot say that the argument for the railway company was so frivolous or unreasonable that the Judicial Committee of the Privy Council may not grant leave to appeal. If we were asked to postpone for a very long period the operation of the order it might not be proper to do so. But as the railway company expects to have its application to the Judicial Committee heard in Feb., and as some time ought to be given to the company to make preparation for complying with the order, I think we might reasonably direct that the order shall not take effect until Mar. 1."

The G.T.R. Co. has given notice that it will apply at the current session of Parliament for an act repealing or amending 16 Vict., chap. 37, sec. 3, and particularly repealing so much of the section as provides that the fare or charge for each third-class passenger by any train on that portion of the company's railway between Montreal and Toronto shall not exceed one penny currency for each mile travelled, and that at least one train, having in it third-class carriages, shall run every day throughout the length of the line.

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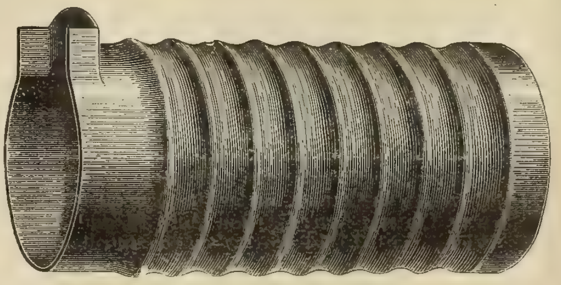

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TRANSPORTATION APPOINTMENTS.

Buffalo, Rochester and Pittsburgh Ry.—E. F. Robinson has been appointed Chief Engineer, succeeding J. M. Floesch, resigned. Office, Rochester, N.Y.

Canadian Northern Ontario Ry.—A. J. Hills, heretofore on the Third Vice-President's staff, has been appointed Superintendent, vice F. M. Spaidal, promoted to the Canadian Northern Quebec Ry. Office, Toronto.

Canadian Northern Quebec Ry.—A. J. Gorrie, General Superintendent, Montreal, has resigned to become Managing Director of the Geo. Hall Coal Co. of Canada, Ltd., Montreal.

F. M. Spaidal, heretofore Superintendent Canadian Northern Ontario Ry., has been appointed General Superintendent Canadian Northern Quebec Ry., vice A. J. Gorrie, resigned. Office for the present, Montreal.

Canadian Northern Ry.—G. S. MacKinnon has been appointed Assistant Master Mechanic, with supervision of the line from Port Arthur, Ont., to Prince Albert, Sask., including branches. Office, Winnipeg.

J. Kyle, heretofore Assistant Master Mechanic, Winnipeg, has been appointed Assistant Master Mechanic, district 4, and Regina Branch. Office, Edmonton, Alta.

Canadian Pacific Ry.—L. O. Armstrong, heretofore Colonization and Tourist Agent, C.P.R., has been appointed Industrial Agent. No circular will be issued in connection with the appointment until the new arrangements respecting the department are completed. Mr. Armstrong is to be relieved of the colonization and tourist work, for which it is likely that a new department will be created.

E. Marshall, heretofore acting locomotive foreman at Outremont, Que., has been appointed general locomotive foreman at McAdam Jct., N.B.

The following changes have been made in locomotive foremen on the Eastern Division: A. Fortin has been appointed to Ottawa, succeeding A. J. Holtby, resigned; F. Howell has been appointed to Quebec, succeeding A. Fortin, transferred; W. J. Hamilton has been appointed to Three Rivers, succeeding F. Howell, transferred; J. A. Carroll has been appointed acting foreman at Outremont, succeeding E. Marshall, transferred to McAdam Jct., N.B.

V. A. Harshaw, heretofore trainmaster district 3, Ontario Division, has been appointed trainmaster district 1, vice D. Carmichael, transferred. Office, Havelock, Ont.

D. Carmichael, heretofore trainmaster at Havelock, Ont., has been appointed trainmaster district 3, Ontario Division, vice V. A. Harshaw, transferred. Office, Toronto.

E. Pattison, heretofore Superintendent's Accountant, district 3, Ontario Division, has been appointed Superintendent's Accountant, district 1, vice C. L. White, transferred. Office, Toronto.

F. V. Slemin has been appointed Superintendent's Accountant, district 3, Ontario Division, vice E. Pattison, transferred. Office, Toronto.

A. Frost has been appointed roadmaster Owen Sound section, Ontario Division, vice B. Tansley, transferred. Office, Orangeville, Ont.

R. K. Oliver, heretofore general foreman McAdam Jct., has been appointed District Master Mechanic, district 2, Lake Superior Division, succeeding A. H. Bilbe, who has resumed his position as locomotive engineer. Office, White River, Ont.

G. F. Morton, formerly locomotive foreman at Schrieber, Ont., who was mentioned in our last issue as having been transferred to other duties, has been appointed assistant foreman at North Bay, Ont.

A. E. Hough has been appointed locomotive foreman at Ignace, Ont., vice M. A. Cardell, transferred to Calgary, Alta.

D. McKay, heretofore Trainmaster at Portage la Prairie, Man., has been appointed Trainmaster at Kenora, Ont., vice H. J. Coffin, transferred.

C. L. White, heretofore Superintendent's Accountant, district 1, Ontario Division, is said to have been appointed Inspector of Timekeeping on Western Lines, with headquarters at Winnipeg.

H. J. Coffin, heretofore Trainmaster at Kenora, Ont., has been appointed Trainmaster district 2, Central Division, succeeding G. Thompson, transferred back to train service. Headquarters, Winnipeg.

In connection with the transfer of A. Price, General Superintendent, from the Central Division at Winnipeg to the Western Division at Calgary, and the transfer of R. R. Jamieson, General Superintendent, from the Western to the Central Division, it was announced in our last issue that district 5, Central Division, had been transferred to the Western Division. The eastern boundaries of the Western Division are now Portal and Arcola, Sask., and Broadview, Man., not including Arcola and Broadview terminals.

J. M. McKay, heretofore Trainmaster Souris, Man., has been appointed Trainmaster at Portage la Prairie, Man., succeeding D. McKay, transferred.

H. Keswick has been appointed locomotive foreman at Newdorf, Sask., succeeding —. Mullen, resigned.

H. Vollans has been appointed assistant roadmaster between Vancouver and North Bend, B.C., succeeding J. B. Perrigo, transferred.

Central Vermont Ry.—R. G. Gilbride, heretofore locomotive foreman G.T.R., Palmerston, Ont., has been appointed roundhouse foreman, C.V.R., at White River Jct., Vt.

E. H. Boynton, New England Passenger Agent G.T.R., has also been appointed New England Passenger Agent C.V. Ry. Office, 360 Washington St., Boston, Mass.

Delaware and Hudson Co.—W. H. Davies has been appointed Comptroller, the position of Assistant Comptroller, previously held by him, being abolished. Office, New York City.

E. W. Porter has been appointed Auditor of Disbursements, and J. W. Brownell has been appointed Auditor of Revenue. Office, Albany, N.Y. The positions of Auditor of Railroad Department Accounts and Auditor of Traffic Accounts have been abolished.

D. I. Roberts, at one time General Passenger Agent Erie Rd., has been appointed General Canadian Freight and Passenger Agent. Office, 160 St. James St., Montreal.

Duluth, South Shore and Atlantic Ry.—S. R. Lewis has been appointed Assistant General Freight Agent. Office, Duluth, Minn.

Grand Trunk Ry.—W. Hamilton has been appointed locomotive foreman at Palmerston, Ont., succeeding R. G. Gilbride, who has gone to the Central Vermont Ry.

W. R. Tiffin, Superintendent Northern Division, Allandale, Ont., having again been granted leave of absence on account of ill-health, P. J. Lynch, Assistant Superintendent, will have charge of the division until further notice.

The following agents have been appointed: Lennoxville, Que., R. F. Findlay; Sherbrooke, Que., E. J. Astell; Stottsville, Que., J. P. Lazure; Lacolle Jct., Que., E. Gregoire; St. Martine Jct., Que., W. J. Marchand; Whites, Que., J. O. Giroux; St. Annes, Que., J. H. Halpenny; Vaudreuil, Que., H. N. Bolte; Mille Roches, Ont., P. Hughes; Brockville (Pass.), Ont., Geo. Harrison; Stirling, Ont., A. W. Andrews; Kinmount, Ont., J. H. Donnelly (Acting); Aurora, Ont., R. C. Fair; Newmarket, Ont., J. C. Galbraith; Terra Cotta, Ont., S. D. Ward; Cheltenham, Ont., S. D. Ward; Tottenham, Ont., W. J. Coulter; Thorndale, Ont., G. VanHorne; Hyde Park, Ont., J. F. Lawson; Wanstead, Ont., R. Cossey; Brantford, Ont., L. Harold; Brussels, Ont., J. O'Neil; Wingham, Ont., W. Henry; Outside Ticket Agent, Boston, Mass., E. H. Boynton.

G. M. Ryan, heretofore assistant city ticket agent, has been appointed Passenger Agent, G.T.R., succeeding H. S. Head, resigned. Office, 290 Broadway, New York City.

H. J. Doering, heretofore connected with the Lehigh Valley Rd. ticket office, Broadway, New York, has been appointed assistant city ticket agent, G.T.R., in that city, succeeding G. M. Ryan, promoted.

Great Northern Ry. (U.S.)—J. M. Gruber, heretofore General Manager Chicago, Burlington and Quincy Rd., has been appointed General Manager G.N.R., succeeding F. E. Ward, resigned. Office, St. Paul, Minn.

W. D. Scott, heretofore Superintendent Cascade Division, has been appointed General Superintendent Eastern District, succeeding E. L. Brown, transferred. Office, St. Paul, Minn.

E. L. Brown, heretofore General Superintendent Eastern District, has been appointed General Superintendent Western District, succeeding F. S. Forest, appointed General Superintendent Portland and Seattle Rd. Office, Spokane, Wash.

In consequence of the promotion of W. D. Scott as General Superintendent, there have been the following transfers of Superintendents: J. H. O'Neill to the Cascade Division; W. R. Smith to the Kalispell Division; L. W. Bowen to the Spokane Division; G. S. Stewart to the Willmar Division; S. Ennes to the Breckenridge Division.

Halifax and Southwestern Ry. — Jas. Bain, heretofore Superintendent Quebec and Lake St. John Ry., has been appointed Superintendent H. and S.W. Ry., succeeding the late J. G. Sullivan. Office, Bridgewater, N.S.

W. D. Barclay has been appointed General Manager, vice C. W. Spencer, resigned. Office, Halifax, N.S.

Intercolonial Ry.—D. A. Story, heretofore Division Freight Agent, Halifax, N.S., has been appointed General Freight Agent, succeeding J. J. Wallace, superannuated Office, Moncton, N.B.

Inverness Railway and Coal Co.—W. D. Barclay has been appointed General Manager, vice C. W. Spencer, resigned. Office, Halifax, N.S.

Lake Shore and Michigan Southern Ry.—W. A. Peters has been appointed travelling passenger agent at Buffalo, N.Y.

Mackenzie, Mann and Co., Ltd.—W. P Chapman, until recently in charge of construction in the Province of Quebec for Mackenzie, Mann & Co., has been appointed Resident Engineer, Toronto, succeeding the late R. F. Tate.

Mackenzie, Mann and Co.'s Eastern Lines.—C. W. Spencer, General Manager of the Canadian Northern Ontario Ry., Canadian Northern Quebec Ry., Halifax and Southwestern Ry., and Inverness Ry. and Coal Co., has resigned. See also Inverness Railway and Coal Co. and Halifax and Southwestern Ry.

Michigan Central Rd.—W. A. Peters has been appointed travelling passenger agent at Buffalo, N.Y.

Minneapolis, St. Paul and Sault Ste. Marie.—W. M. Grosh has been appointed Superintendent of the Commissary Department, succeeding the late W. C. Kent. Office, St. Paul, Minn.

W. H. Everett has been appointed contracting freight agent, succeeding E. L. Cardle, appointed general agent at Portland, Me. Office, St. Paul, Minn.

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G. M. Jackson has been appointed travelling passenger agent at Spokane, Wash.

Napierville Junction Ry.—W. H. Davies, Comptroller Delaware and Hudson Co., has also been appointed Comptroller N.J.R. Office, New York City.

New York Central and Hudson River Ry.—S. P. Hull, heretofore Engineer of Signals, has been appointed Engineer of Maintenance of Signals, with authority over all divisions except the electric division. He will report to the general superintendents. Office, New York.

W. H. Elliott, an Assistant Signal Engineer, has been appointed Engineer of Signals, succeeding S. P. Hull. He has authority over all divisions except the electric division. Office, New York.

Northern Pacific Ry.—G. T. Slade has been appointed General Manager lines east of Trout Creek, succeeding H. J. Horn. Office, St. Paul, Minn.

I. B. Richards has been appointed acting General Superintendent lines Mandan to Trout Creek, with office at Livingston, Montana.

F. W. Gilbert remains as General Superintendent lines east of Mandan, with office at St. Paul, Minn.

Pere Marquette Rd.—The following elections and appointments were made at a meeting of directors held Dec. 14: Chairman of the Board, G. W. Perkins, New York City; President, W. Cotter, heretofore General Manager, Detroit, Mich.; Secretary and Treasurer, J. E. Howard, Cincinnati, Ohio. The directors are: G. W. Perkins, H. F. Shoemaker, G. W. Young, W. T. Cross, E. H. Harriman, C. Steele, F. D. Underwood, G. A. Richardson, G. F. Baker, N. D. Ream, J. G. McCullough, W. B. Horn; A. Wardwell, T. W. Joyce, New York; F. W. Stevens, Detroit.

Pullman Co.—F. R. Neat has been appointed District Superintendent, succeeding C. C. Barclay. Office, St. Paul, Minn.

Quebec and Lake St. John Ry.—J. J. Sunderland, heretofore Trainmaster, has been appointed Superintendent, succeeding Jas. Bain, appointed Superintendent Halifax and Southwestern Ry.

Quebec Central Ry.—In consequence of A. H. Anderson, Purchasing Agent and Treasurer, having been convicted of embezzlement, F. C. Young has been appointed Acting Treasurer. The duties of Purchasing Agent will for a time be discharged by M. A. Hawkins, Storekeeper.

Quebec, Montreal and Southern Ry.—W. H. Davies, Comptroller Delaware and Hudson Co., has also been appointed Comptroller Q.M. and S.R. Office, New York City.

J. Leslie, General Roadmaster, has resigned and is now with the Temiskaming and Northern Ontario Ry. The position of General Roadmaster, Q.M. and S.R., has not been filled, the junior roadmaster, T. Prennan, having been continued as roadmaster, and given an assistant foreman to help him.

Reid-Newfoundland Co.—H. A. Lovett, K.C., Halifax, is reported to have been appointed permanent Consulting Counsel. It is said he has also given a similar appointment by the Dominion Coal Co., and will have the privilege of attending to his private practice.

Rock Island-Frisco Lines.—A. C. Turpin, Travelling Freight and Passenger Agent, Canadian District, with headquarters at Buffalo, N.Y., has been transferred to Chicago, Ill., as passenger agent at the La Salle St. station. It is said that the Canadian territory will hereafter be looked after by H. M. Brown, District Passenger Agent at Buffalo.

Transcontinental Ry. Commission. — J. Aylen is acting District Engineer at North Bay, Ont., pending the appointment of a successor to S. R. Poulin, appointed acting District Engineer at Kenora, Ont.

No appointment has been made of an assistant District Engineer at Kenora to succeed A. F. Heaman, resigned. This is the position to which C. O. Foss, Assistant District Engineer at St. John, was reported to have been transferred. This information was given in the House of Commons Dec. 9, by the Minister of Railways.

A press report states that it is intended to transfer the office of the District Engineer for District F from Kenora, Ont., to St. Boniface, Man.

Wabash Rd.—F. G. Frieser, heretofore Assistant Foreign Freight Agent, has been appointed Foreign Freight Agent, succeeding Jos. Hodgson, Jr. Office, St. Louis, Mo.

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Grand Trunk Locomotive Orders.

Early in Dec. it was announced in the daily press that the G.T.R. had placed orders for 100 locomotives. Particulars in regard to 50 of these were previouly published in our Oct. and Nov. issues, but we have been furnished with some additional information in regard to them. Part of them are for the G.T.R. and part for the G.T. Pacific Ry. The complete particulars are as follows:

For the G.T.R. 20 Richmond compound consolidation locomotives, ordered from the Locomotive and Machine Co. of Montreal, for delivery in Sept., 1908. The general specifications were given in our Nov. issue. The revised specifications give the weight on drivers as 184,300 lbs. and weight in working order as 211,200 lbs., instead of 179,500 and 206,000 lbs. as previously stated. The heating surface in square feet is tubes 2,757.1, fire-box, 168.2, total, 2,925.3; grate surface, 50.62 sq. ft.

For the G.T.R. 10 ten-wheelers from the Baldwin Locomotive Works, Philadelphia, Pa., for delivery in May, 1908. Following are the general specifications:

Diameter of drivers, 73 ins.

Weight in working order, total, 167,300 lbs.; on drivers, 126,420 lbs.

Cylinders, 19 x 26 ins.

Boiler: Type, extended wagon top; working pressure, 210 lbs.; diameter at smallest ring, 60¼ ins. outside.

Fire-box, length, 108⅛ ins. inside; width, 40⅝ ins. inside; depth, 72 ins. F., 60 ins. B.

Tubes, no., 270; diameter, 2 ins.; length, 13½ ft.

Heating surface, in sq. ft., tubes, 1,916.8; fire-box, 160.2; total, 2,077; grate surface, 30.5 sq. ft.

Tender, style, hopper. Truck, G.T.R. standard with metallic bolster. Water capacity, 6,000 gals.; coal, 10 tons.

For the G.T.R. 10 simple Moguls from the Baldwin Locomotive Works, for delivery in Sept., 1908. Following are the general dimensions:

Diameter of drivers, 63 ins.

Weight in working order, total, 161,976 lbs.; on drivers, 138,176 lbs.

Cylinders, size 20 x 26 ins.

Boiler: Type, extended wagon top; working pressure, 200 lbs.; diameter at smallest ring, 62 ins. outside.

Fire-box, length, 120 ins. inside; width, 40⅛ ins. inside; depth, 76¾ ins. F., 65 ins. B.

Tubes, no., 283; diameter, 2 ins.; length, 11 ft. 11 ins.

Heating surface, in sq. ft., tubes, 1,803; fire-box, 188; total, 1,991. Grate surface, 33.43 sq. ft. Tender, style, hopper. Truck, G.T.R. standard with metallic bolster. Water capacity, 6,000 gals.; coal, 10 tons.

For the G.T.R. 10 switching locomotives from the Baldwin Locomotive Works, for delivery in Aug., 1908. The general dimensions follow:

Diameter of drivers, 56 ins.

Weight in working order, total, 139,500 lbs.; on drivers, 139,500 lbs.

Cylinders, size 20 x 26 ins.

Boiler: Type, straight; working pressure, 190 lbs.; diameter at smallest ring, 66 ins. outside

Fire-box, length, 98½ ins. inside; width, 40⅜ ins. inside; depth, 69 ins. F., 67 ins. B.

Tubes, no., 264; diameter, 2 ins.; length, 12 ft., 9½ ins.

Heating surface, in sq. ft., tubes, 1,772; fire-box, 148; total, 1,920. Grate surface, 27 44 sq. ft., Tender, style, hopper. Truck, G.T.R. standard with wooden bolster. Water capacity, 5,000 gals.; coal, 8 tons.

For the G.T. Pacific Ry., 30 simple road locomotives from the Locomotive and Machine Co. of Montreal, for delivery from Mar. to July, 1908. The general dimensions of these were given in our Nov. issue. The revised specifications give the diameter of drivers as 69 ins. instead of 63 ins. as previously stated, the weight in working order as 121,688 lbs. instead of 120,000 lbs., and the weight on drivers as 74,060 lbs. instead of 80,000.

For the G.T. Pacific Ry., 20 simple road locomotives from the Canada Foundry Co., Toronto, for delivery April to Aug., 1908. The general specifications of these given in our Oct. issue differ somewhat from the revised figures which follow:

Diameter of drivers, 69 ins.

Weight in working order, total, 121,688 lbs.; on drivers, 74,060 lbs.

Cylinders, size 18 x 24 ins.

Boiler: Type, extended wagon top; working pressure, 200 lbs.; diameter at smallest ring, 55¼ ins. outside.

Fire-box, length, 95¾ ins. outside; width, 41⅞ ins. inside; depth, 63 ins. F., 50 ins. B.

Tubes, no., 210; diameter, 2 ins.; length, 11 ft. 2¾ ins.

Heating surface, in sq. ft., tubes, 1,259; fire-box, 126; total, 1,385. Grate surface, 28 sq. ft. Tender, style, hopper, water bottom. Truck, G.T.R. standard with C.S. bolster. Water capacity, 7,000 gals.; coal, 10 tons.

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Central Railway and Engineering Club of Canada.—At the annual meeting in Toronto Dec. 17, the following were elected officers for the current year: President, W. R. McRae, Master Mechanic Toronto Ry.; Vice-President, Acton Burrows, Managing Director RAILWAY AND MARINE WORLD; Second Vice-President, C. A. Jefferis, Master Mechanic Consumers Gas Co.; Executive Committee, J. Bannon, G. Black, A. Dixon, H. G. Fletcher, J. J. Fletcher, J. C. Garden, R. Patterson. The club, which was only organized early in 1907, has a membership of over 200.

In the proceedings for the liquidation of the J. B. McManus Co., contractors, Memramcook, N.B., H. J. McGrath, E. A. Reilly, and H. F. Puddington, were appointed permanent liquidators by the New Brunswick Court, Dec. 10.

A press report stated recently that M. J. Haney, C.E., Toronto, had been awarded a contract for the construction of a railway by one of the companies controlled by the Guggenheim firm. We are advised that this is an error, Mr. Haney stating that he knows nothing whatever about it.

W. D. Barclay, who has been appointed General Manager Halifax and Southwestern Ry., and Inverness Ry. and Coal Co., was born at Campbellton, N.B., Sept. 23, 1852. He entered railway service in 1867, since when his record has been to 1869, chairman Western Extension Ry.; 1869 to 1870, assistant engineer, same road; 1870 to 1871, assistant engineer, Maine Central Rd.; 1871 to 1875, assistant engineer, Prince Edward Island Ry.; 1875 to 1876, engineer-in-charge, Spring Hill and Parrsboro Ry.; 1876-1877, assistant engineer, Intercolonial Ry.; 1877 to 1879, principal assistant engineer, Eastern Extension Ry. of Nova Scotia; 1879 to 1881, engineer C.P.R., Winnipeg; 1881 to 1882, division engineer, Western Division; 1882 to 1883, assistant chief engineer; 1883 to 1885, acting chief engineer, same road; 1885 to 1886, engineer, Alberta Ry. and Coal Co.; 1886 to 1888, division engineer, Great Northern Ry., U.S.; 1888 to 1890, engineer, Foley Bros. and Guthrie, railway contractors; 1890 to 1894, General Superintendent, Alberta Ry. and Coal Co., and Great Falls and Canada Ry.; 1894 to May, 1899, Manager, same roads; since 1899 Mr. Barclay has been engaged in railway contracting with Foley Bros. and Larson, and retired from that firm about a year ago, since which he has been living in St. Paul, Minn.

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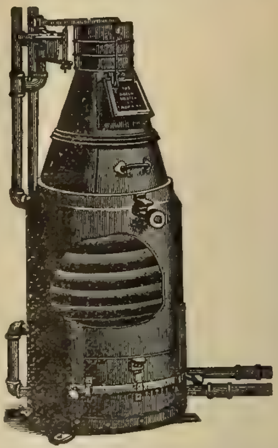

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ELECTRIC RAILWAYS.

Projects, Construction and Betterments.

Arkona-Sarnia.—A proposal to construct an electric railway from Arkona to Sarnia, Ont., about 35 miles, is under consideration. Power would be supplied from the Rock Glen power plant, recently established on the Ausable river, near Arkona.

Belleville, Ont.—A committee has been appointed by the Belleville, Ont., Board of Trade, to negotiate with the G.T.R. respecting the construction of an electric railway to the cement works.

Brantford and Hamilton Ry.—The inspection of this railway by the Government Engineer has been completed, and it was expected to be opened for traffic by Dec. 31. (Dec., 1907, pg. 927.)

British Columbia Electric Ry.—The company is preparing to construct in Vancouver a combined office building and station, at a cost of about $100,000. During the coming season it is proposed to add to double-track on the New Westminster interurban line. (Dec., 1907, pg. 927.)

Cobalt District.—Representatives of the municipalities of New Liskeard, Dymond, Bucke, Coleman, Cobalt and Latchford, met at Haileybury, Ont., Dec. 5, for the purpose of considering the granting of a franchise for the operation of an electric railway. The Silver Belt Electric Ry. Co. and the Nipissing Central Ry. Co. have charters covering the construction of electric railways in the district, and representatives were present to state the views of the promoters. A committee was appointed to draw up an agreement for a franchise, which will be submitted for approval to the different municipalities interested. The feeling of the meeting seemed to favor the granting of a franchise to the Nipissing Central Ry. (Dec., 1907, pg. 927.)

Dominion Power and Transmission Co.—We are advised that the company has no present intention of erecting freight sheds or car shops in Hamilton, Ont. When the time comes for the company to do this, we are informed, it will manufacture such car bodies as it needs for its own lines.

Dunnville, Wellandport and Beamsville Electric Ry.—It is announced that construction work on this proposed line will be commenced early this year. The plans are for a line of about 40 miles, passing through Dunnville, Attercliffe, Wellandport, Bismarck, St. Ann's and Spring Creek, and a possible branch line through Boyle, Fenwick, Pelham Centre and Ridgeville to Fonthill. It is hoped to complete a section of about 15 miles this year. (July, 1907, pg. 505.)

Erie, London and Tillsonburg Electric Ry.—An application has been made for an extension of time in which to commence construction of the proposed line between Port Burwell and London, Ont.

Grand Valley Ry.—The final survey of the projected electric railway between Brantford and Woodstock, Ont., is reported to have been completed. The route is by way of Burford, Cathcart and Eastwood. This would connect up the company's lines in Brantford city, and the Brantford-Paris-Galt line with its Woodstock, Thames Valley and Ingersoll Ry. The company was recently reported to have been negotiating with the Ontario Hydro-Electric Power Commission for the supply of about 3,000 h.p. for use on its lines. The General Manager of the company stated subsequently that prior to the change of control one of the officials applied for information as to price, etc., of power, but no one was applying on behalf of the company as at present constituted. (Nov., 1907, pg. 841.)

Hamilton, Grimsby and Beamsville Electric Ry.—New rails have been distributed for relaying portions of the line at the city limits. Other improvements on the line will also be carried out. (Dec., 1907, pg. 927.)

Hamilton Mountain.—A company of local business men of Hamilton, Ont., according to T. H. Pratt, is being formed for the purpose of constructing an electric railway along the face of the mountain, north of the drive, and diverging to Albion Mills.

The Hamilton Radial Electric Ry. Co.'s application for a charter of incorporation from the Dominion came before the House of Commons Dec. 5. The petition for the act sets out that the company has been advised that when the line of railway "was carried across the line of the G.T.R. at Burlington in 1897, and when the Dominion Railway Act of 1888 was in full force and effect, the railway became a railway under the exclusive jurisdiction of the Parliament of Canada." The company also desires power to extend its lines to Brantford, Woodstock and Windsor, Ont. The application is being opposed on behalf of the city of Toronto, as well as by other interests. (Dec., 1907, pg. 927.)

London Street Ry.—The Board of Control of the city council of London, Ont., has instructed the City Engineer to prepare plans for the extension of the street railway that will meet the requirements of the city from the citizen's standpoint. (Dec., 1907, pg. 927.)

Montreal Southern Ry.—The Minister of Railways has approved of the route map in the city of Montreal, subject to an opinion, which is to be obtained from the Justice Department as to whether the company has a right to operate on the Island of Montreal. The Montreal Street Ry. Co. contends that the company's charter only permits it to run its cars to the Montreal end of the Victoria Bridge, and that it should be prepared to hand its traffic over to the city company. (Dec., 1907, pg. 927.)

Niagara, St. Catharines and Toronto Ry.—The Board of Railway Commissioners approved recently of the location plans of this company's projected extension from Thorold township to Brantford, Ont. It is not known when construction will be gone on with. The Dominion Parliament will be asked at its current session for an act extending the time within which the company may construct the remainder of its authorized line of railway and branches. (Dec., 1907, pg. 927.)

St. Vital, Man.—A by-law is being submitted to the ratepayers for the construction of a municipally owned electric railway. An estimate has been submitted showing that the immediate expense of construction and equipment would be $80,000, and there would be an annual expense of $14,000 for maintenance. The system would be operated by electricity generated by gasolene driven engines. The council has decided to rescind the franchise previously given to the Winnipeg Electric Street Ry.

Sydney and Glace Bay Ry.—The cost of plant and machinery to be installed in the power-house which is being constructed at Glace Bay for the company, is about $25,000. The contractors for the erection of the building are Rhodes, Curry & Co., Amherst, N.S. (Sept., 1907, pg. 683.)

Toronto and York Radial Ry.—An application was made Dec. 17 to the Ontario Railway and Municipal Board by East Toronto township, to compel the company to carry out the agreement entered into between the township and the Toronto and Scarborough Ry., Light and Power Co., the former owners of the road. It is claimed that the agreement, in part, provides for the construction and operation of track and cars on Danforth Rd., which has not been done.

Toronto Ry.—The Toronto Jct. Town Council has decided to apply to the Ontario Railway and Municipal Board to compel the Toronto Ry. to operate its cars in the township.

Toronto Underground Ry.—In accordance with instructions, C. H. Rust, City Engineer, has prepared estimates of a proposed underground railway system. In his report he states that the population is not at present sufficiently large for such an undertaking to prove profitable, and it should not be dealt with until the population has reached 1,000,000. His estimate for such a railway on the Yonge, King and Queen street routes is $23,250,000, or about $1,500,000 a mile of double-track, including stations, etc.

Windsor and Tecumseh Electric Ry.—The hearing of the case against the company brought by the township of Sandwich East, involving the question of street grading there, took place at Windsor, Ont., Dec. 20.

Winnipeg Electric Street Ry.—The municipality of St. Vital, Man., has decided to rescind the franchise given to the W.E.S.R. for the construction of an electric railway there, and to submit a by-law for a municipally owned line.

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Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Gross earnings for Oct., $177,105; operating expenses, $86,567; renewal funds, $10,750; net earnings, $79,788; approximate income from investments, $11,036; net income, $90,824; against, $123,880 gross earnings; $59,083 operating expenses; $9,638 renewal funds; $55,159 net earnings; $9,536 approximate income from investments; $64,695 net income, for Oct., 1906. Gross earnings for four months ended Oct. 31, $633,439; net earnings, $310,393; against $453,338 gross and $224,997 net for same period, 1906.

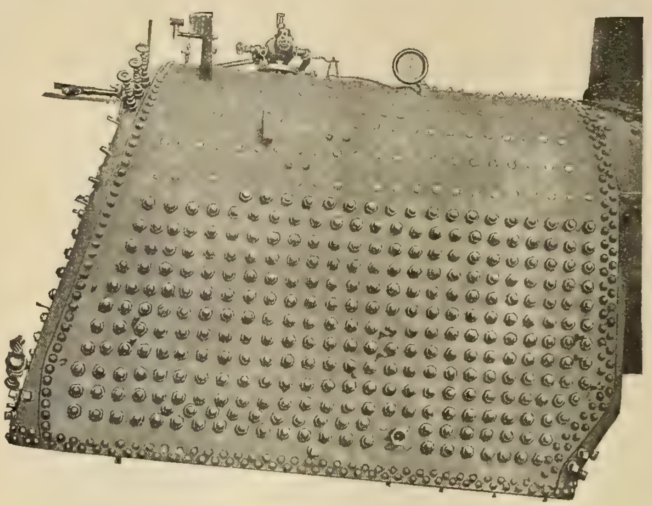
Halifax Electric Tramway Co.—Traffic receipts for Nov., $11,836.05, against $11,849.34 for Nov., 1906.

Montreal St. Ry.—Passenger earnings for Nov., $292,087.46; miscellaneous, $4,097.01; total earnings, $296,184.47; operating expenses, $182,637.54; net earnings, $113,546.93; city percentage on earnings, $10,240.18; interest on bonds and loans, $16,470.63; contingent for renewals, $14,604.37; rent leased lines, $339.96; surplus, $71,891.79; against $257,349.46 passenger, $5,910.95 miscellaneous, and $263,260.41 total earnings; $174,933.26 operating expenses; $88,327.15 net earnings; $9,008.03 city percentage on earnings; $17,074.61 interest on bonds and loans; $13,193.74 contingent for renewals; no rent for leased lines, and $49,050.77 surplus for Nov., 1906. Total earnings for two months ended Nov. 30, $608,082.65; operating expenses, $347,412.68; city percentage on loans, $21,062.20; standing charges, $63,881.71; surplus, $175,926.26; against $545,082.69 total earnings; $331,173.78 operating expenses; $18,676.65 city percentage on loans; $61,209.63 standing charges, and $134,022.63 surplus, for same period, 1906.

The Port Arthur Electric Ry. filed its rates and tariff of fares with the Ontario Railway and Municipal Board, Dec. 16.

Toronto Ry.—Car earnings for Nov., $279,235.50, against $247,319.35 for Nov., 1906. Earnings for 11 months ended Nov. 30, $3,098,545.23, against $2,780,061.09 for same period 1906.

Winnipeg Electric St. Ry.—The usual quarterly dividend at the rate of 8% per annum, has been declared to holders of record Dec. 17, 1907, payable Jan. 2.



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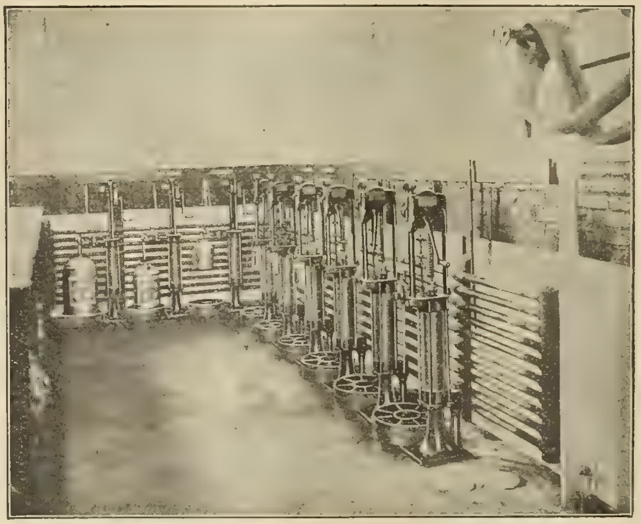

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Yarmouth, N.S., Street Ry.—A press report states that arrangements have been made with the Eastern Trust Co. for the incorporation of the Yarmouth Electric Co., for the purpose of taking over the Yarmouth St. Ry., extending the line and providing additional capital.

◆

Electric Railway Notes.

T. H. McCauley has been appointed examiner of motormen for the Port Arthur (Ont.) Electric Ry.

It is said that the system of "pay-as-you-enter" cars will be adopted on the Toronto Ry. in the near future

The Great Northern Ry., U.S., has ordered four 100-ton electric locomotives to handle trains through the Cascade Range tunnel.

The Hamilton Radial Ry. has declined, in response to a petition from Burlington residents, to reduce workingmen's fares between that place and Hamilton.

The Winnipeg city Board of Control recently received plans of a new street car fender from England, and have decided to have it tested on the cars there.

The Attorneys-General of Canada and Ontario have issued a writ against the Grand Valley Ry., to restrain it from running its railway cars in Brantford, Ont., on Sundays.

J. McIlwraith, a motorman employed on the Hamilton St. Ry., was acquitted Dec. 16 on a charge of criminal negligence, in a collision between a G.T.R. train and his car at the King St. and Ferguson Ave. crossing recently.

Tests were made recently in Toronto of a new street car fender, before engineers and other officials of the Ontario Railway and Municipal Board. The device not only drops the fender, but applies air brakes and sands the track, and is a local invention.

The Hamilton city Board of Works is reported to have engaged expert assistance in obtaining a report on the condition of the Hamilton St. Ry. Co.'s tracks and cars, with a view to laying the matter before the Ontario Railway and Municipal Board, whose order of Jan., 1907, the Board of Works holds, has not been carried out.

Arrangements are being made by the Hamilton city solicitor with the promoters of the radial railway, which is being brought before Parliament, for a conference regarding the city's objections. It is understood that the city will not object to the company having a Dominion charter for its trunk lines, but holds that the suburban lines should be operated under a Provincial one.

In our Dec. issue it was stated that C. Green has been appointed traction manager; G. E. Waller, general freight and passenger manager; A. Orr, chief clerk in the freight and passenger departments, and J. M. Seabrook and L. Pfeiffer, ticket agents of the Hamilton, Grimsby and Beamsville Electric Ry. We have been advised that these appointments have not been made, although they were so announced in local papers.

Following a custom which has been in force for the past five years the British Columbia Electric Co. has distributed among its employes a percentage of its profits amounting to about $30,000. The profit-sharing plan provides that after a 4% dividend is paid to stockholders, the balance of the profits are divided in the proportion of two-thirds to the stockholders and one-third to the employes. In 1906 the company paid each employe about $45, and in 1907 about $63. This inducement is held out to the employes to continue in the service, and it is found that it produces a better feeling between the employes and the company.

B.C. Electric Ry. Co.'s Extensions.

The electric railway which the British Columbia Electric Ry. Co. proposes to build from New Westminster through the southern part of the lower Fraser Valley will be 63 miles long, and will have connection at New Westminster with the company's present main line to Vancouver. Leaving South Westminster, the line will run south to Cloverdale, and thence practically due east to the town of Chilliwack, passing through the municipalities of Surrey, Langley, Matsqui, Sumas and Chilliwack, en route. The territory thus to be served covers about 350,000 acres, much of it being open and prairie land of an exceedingly high quality. The high lands contain much fine timber, and the building of the road will give an opportunity of this being milled close to the line and transferred from the electric railway to the Canadian Pacific and Great Northern Railways for shipment east and south. Connection with these railways will be made at New Westminster and Abbotsford. Agriculturally, the country is exceedingly prosperous, but its progress has been retarded by lack of proper transportation facilities. It is with a view of supplying these facilities and in the belief that the enterprise will be rewarded in the form of reasonable profits within five to ten years, that the company is entering this territory.

Construction will be performed by contract, and it is probable that the first section of 12 miles, plans for which are practically complete, will be let at an early date. The roadbed, gradients, curvature and bridges will follow standard railway practice, and 70-lb. rails will be laid. It is proposed to operate passenger trains, on multiple unit system, hourly between New Westminster and Chilliwack, making the run in an hour and three-quarters. Express and freight trains will be run as the demands of the service may require.

The company proposes, in addition to the railway service, to supply electric light and power everywhere throughout the district, departing, whenever same may be advisable, to considerable distances from the line of railway. Current at 40,000 volts will be supplied from the company's generating station at Lake Buntzen, to the several sub-stations situated at the most advantageous places along the railway. At these sub-stations the current will be stepped down by suitable transformers to a lower voltage for operating the railway and also for supplying light and power. The transmission line erected on 50-ft. poles will be in duplicate throughout, thereby assuring a continuous service. The total length of the Transmission Line, single distance, from the power-house to Chilliwack is 75 miles. It has not yet been decided whether the road will be single-phase or 500 volts d.c.

Daily papers in B.C. have referred recently to the purchase by the B.C. Electric Ry. Co., of the Vancouver, Fraser Valley and Southern Ry. Co.'s charter. We are advised that this is not a recent purchase, but that it was made some time ago. The B.C.E.R. Co. has no intention of making any immediate use of the charter, but it is possible that it may be used in connection with the Westminster-Chilliwack branch.

It was also reported that the company had obtained large water rights on the Lillooet River. This is not confirmed, but we understand that the proposition has been looked into.

◆

The Pere Marquette Rd.'s departments now located at Cincinnati will, it is said, be removed to Detroit, Mich., at once, where quarters will be rented until two stories can be added to the freight house to accommodate the staff, which numbers about 200.

Grain Elevator Notes.

O. W. Kelly has been appointed Superintendent of the Canadian Northern Quebec Ry. elevator at Quebec.

D. McLeod, working at elevator B, Fort William, Ont., was caught in the belting and instantly killed, Dec. 1.

The Smith Grain Co.'s elevator at Wood Bay, Man., was destroyed by fire Dec. 2. The damage is estimated at about $6,000.

F. D. Baker, engaged on the new Government elevator at Port Colborne, Ont., fell from the lower roof, a distance of about 175 ft., and was killed, Dec. 7.

About five carloads of grain, stored in Wallace and Cooper's elevator at Morristown, Ont., was destroyed by fire recently, which, it is said, was due to spontaneous combustion. The elevator itself was not damaged.

The Port Arthur Elevator Co., Ltd., incorporated under the Dominion Companies Act, has been licensed under the act respecting extra-provincial companies, to carry on its business in Ontario, with R. D. Morgan, Port Arthur, as its attorney.

The contract for the re-construction of the C.P.R.'s elevator D at Fort William, Ont., has been let to the Barnett & McQueen Co. It is anticipated that the work will be commenced at once, and continued throughout the winter. The price is stated as about $600,000

The Guelph and Goderich Ry., and the C.P.R., jointly, have been granted permission by the Board of Railway Commissioners to construct a grain spout from the Goderich Elevator and Transit Co.'s elevator, across G.T.R. lands and tracks, to enable grain to be delivered direct into the cars at Goderich, Ont.

The Montreal Warehousing Co.'s elevator at Windmill Point has, during the past season, shipped one-half of the total grain shipments from Montreal. The total shipments were about 32,000,000 bushels, of which the Montreal Warehousing Co. loaded 9,000,000 direct to vessels alongside, and 7,000,000 by barges to vessels in the harbor.

◆

Among the Express Companies.

The Dominion Ex. Co. has declined to accede to the request that the charge for delivery of parcels south of the G.T.R. tracks at Ottawa be abolished.

The Canadian Northern Ex. Co. has extended its service over the La Tuque branch of the Quebec and Lake St. John Ry., recently opened. J. A. Jean has been appointed agent at La Tuque.

What is claimed to be a record in express transfer, is credited to the Dominion Ex. Co. A consignment of poultry shipped from Liverpool, Eng., was delivered in Edmonton, Alta., within 11 days, beating the mail by one day.

The enquiry by the Board of Railway Commissioners into the manner in which express companies fix their rates, was opened Dec. 10, in Montreal. J. Bryce, Vice-President and General Manager Canadian Ex. Co., and W. S. Stout, President, and General Manager Dominion Ex. Co., were the first officials to give evidence. Before the conclusion of Mr. Stout's evidence, the enquiry was adjourned Dec. 18, until a date in Jan., not announced.

◆

The Montreal Board of Trade is considering the question of employing a railway freight expert, but no definite decision has been reached. The object of the council in considering the matter is that the officer should assist the members of the Board in protecting the interests of Montreal as a distributing centre.

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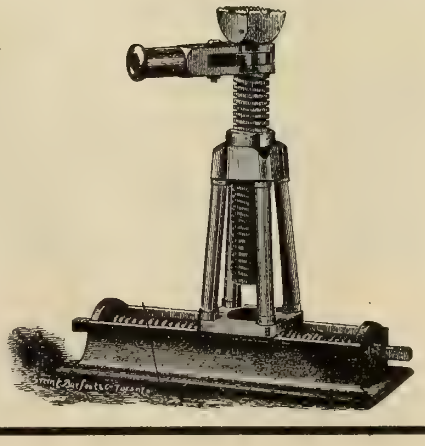

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MARINE DEPARTMENT

The Wreck of the Lurline.

An enquiry into the cause of the wreck of the Ontario Government's fishery cruiser Lurline on the submerged cribwork at Goderich harbor, on Sept. 26, was held recently by Commander O. G. V. Spain, assisted by Capts. A. Wiggins and S. Crangle as assessors. The Commissioners find "That Capt. J. B. Forest did not take the necessary precautions to possess himself of the latest information in regard to Goderich harbor, which could have been easily obtained from the last port the ship left, and the same information could also have been easily obtained from the coast pilot book, which was on board at the time; this officer, however, was under the very mistaken impression that the aids to navigation at the entrance to Goderich harbor were exactly the same as they were when he was last there, between 15 and 20 years ago, and that the casualty to the Lurline was caused by the indifference and neglect of the master in not supplying himself with the necessary information in regard to the aids to navigation which have been established in recent years." The Commissioners find that the old ranges, which are still in existence, are misleading nevertheless, and recommends that they should be immediately discontinued. Capt. Forest has been suspended for six months

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Northern Navigation Co. of Ontario.

This company has had prepared plans for a steamship to be added to its fleet for the season of 1909. They show a vessel 361 ft. long, 27 ft. moulded depth, and 46 ft. beam. The specifications provide for six Scotch boilers and quadruple expansion engines, to give a speed of 20 miles an hour. Accommodation is provided for about 400 passengers, there being about 190 staterooms in two tiers, and 12 parlor rooms, the dining-room having seating capacity for 168. The vessel as designed would have all the best features of vessels of a similar class in the Upper Lakes trade, and several new features which it is claimed would make her the finest and fastest boat of the kind on the lakes. The plans have been prepared by H. Calderwood, of Toronto, with F. Kirby, of Detroit, Mich., as consulting naval architect. The probable cost is stated as about $500,000. No contract has been placed, but it is said that one will likely be given in the near future, and that the vessel will be built in Canada.

Since the above paragraph was written the directors have declared an 8% dividend for 1907, as against 6% and 1½% bonus for 1906. The net earnings for 1907 increased by about 10%, the total net revenue being 17% on the capital of $840,000. Most of the surplus will be devoted to the renewal fund. A ten-year contract has been made with the G.T.R. and G.T. Pacific Ry. Companies for the exchange of passengers and freight. The closing of this contract makes it practically certain that a new vessel as described above will be built.

◆

Canadian Purchases of U.S. Vessels.

During 1907 there were added to the Canadian register of shipping, 39 vessels of 7,388.15 tons gross, and 5,416.7 tons register, built in the United States. Of these 11 were sailing vessels of 2,993 tons gross and 2,598 tons register, and 28 were steamships of 4,395.15 gross tons and 2,818.7 register tons. Four of the vessels—two steamers and two sailing vessels, went to the Atlantic coast, the net tonnage being 33 of steam and 27 of sailing tonnage; the Great Lakes received 14 steamers and eight sailing vessels (including dredges), the net tonnage being 2,100 tons steamers, and 2,434 tons sailing vessels. Pacific Coast ports received 12 steamers of 685.7 net tons, and one sailing vessel of 67 net tons. The following list shows the names, port of building, port of registry and size of these vessels:

ATLANTIC COAST PORTS.

STEAMERS.			Gross.	Reg.
Daphne	U.S.	Liverpool, N.B.	11	7
Judge Morse	Tarrytown, N.Y.	St. John, N.B.	38	26
SAILING.				
Fan. W. Freeman	Gloucester, Mass.	Shelburne, N.B.	91	79
Iolanthe	Davenport, Mass.	St. Andrews, N.B.	18	18

GREAT LAKE PORTS.

STEAMERS.			Gross.	Reg.
Blue Peter III	West Mystic, Conn	Montreal	5	5
B. J. Cockell	U. S.	Port Stanley, Ont.	24	16
Brant	New York	Quebec	6	5
Caprice	Middleton, Conn	Brockville, Ont.	9	6
City of Grand Rapids	Grand Haven, Mich	Sarnia, Ont	327	196
Fashion	W. Bay City, Mich	Ottawa	43	27
Gen. W. B. Franklin	Alexandria Bay, N.Y.	Kingston, Ont	20	16
Hazel W	Marquette, Mich	Sault Ste. Marie, Ont.	5	4
Iroquois	Main City, Wis	Montreal	1962	1276
John Owen	Detroit, Mich	Sault Ste. Marie, Ont.	439	230
Lyle	Algonac, Mich	Sarnia, Ont	5	3
Maryota	Racine, Wis	Montreal	10	7
M. Bradshaw	Benton Harbor, Mich	Collingwood, Ont	500	296
Nomad	Boston, Mass	Kingston, Ont	19	13
SAILING.				
Ab. L. Andrews	Toledo, Ohio	Kingston, Ont	312	287
Dredge No 7	Duluth, Minn	Port Arthur, Ont	235	235
Dredge No. 10	Saginaw, Mich	Sault Ste. Marie, Ont.	434	354
Dredge No. 14	" "	" "	451	352
Ed. Hall, No. 1	Bay City, Mich	Sarnia, Ont	301	246
Ford River	Milwaukee, Wis	Kingston Ont	254	210
Gov. Warmington	Vermillion, Ohio	Ottawa	579	502
Sophia Minch	" "	Sarnia, Ont	248	248

PACIFIC COAST PORTS.

STEAMERS.			Gross.	Reg.
Beaver	Ballard, Wash	Vancouver, B.C.	38	26
Cruiser	Fir, Wash	" "	12	8
Dauntless	Bellingham, Wash	" "	10	7
Eagle	Eagle City, Wash	Victoria, B.C.	67	67
Echo	Anacorts, Wash	Vancouver, B.C.	12	8
Hattie Hanson	Pontiac, Wash	" "	105	71
J. E. Boyndon	Seattle, Wash	" "	123	83
Joe	Everett, Wash	" "	5.15	3.51
Nora	Pt. Maddington, Wash	" "	13	8.19
North-West	Portland, Ore	" "	638	388
Queen City	Seattle, Wash	Victoria, B.C.	67	67
Skate	Ballard, Wash	Vancouver, B.C.	13	9
SAILING.				
T. F. Bayard	Brooklyn, N.Y.	Victoria, B.C.	70	67

◆

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie Canals in November:

ARTICLES.			CANADIAN CANAL	U.S. CANAL	TOTAL
Copper	Eastbound	Net tons	5,184	9,361	14,545
Grain	"	Bushels	3,507,189	4,223,643	7,730,832
Building stone	"	Net tons	....	....	...
Flour	"	Barrels	463,838	509,300	973,138
Iron ore	"	Net tons	1,025,059	3,383,825	4,408,884
Iron, pig	"	"	22	4,039	4,061
Lumber	"	M. ft. B.M.	5,238	59,839	65,077
Silver ore	"	Net tons	....	....	....
Wheat	"	Bushels	7,865,348	6,680,229	14,545,577
General merchandise	"	Net tons	8,687	1,680	10,367
Passengers	"	Number	324	480	804
Coal, hard	Westbound	Net tons	48,425	170,499	218,924
Coal, soft	"	"	174,332	759,082	933,414
Flour	"	Barrels	....	....	....
Grain	"	Bushels	....	....	....
Manufactured iron	"	Net tons	11,855	25,446	37,301
Salt	"	Barrels	9,500	33,137	42,637
General merchandise	"	Net tons	70,421	62,767	133,188
Passengers	"	Number	212	118	330
Freight—Eastbound		Net tons	1,413,689	3,867,033	5,280,722
" Westbound		"	306,391	1,022,764	1,329,155
Total freight		"	1,720,080	4,889,797	6,609,877
Vessel passages		Number	751	1,390	2,141
Registered tonnage		Net	1,359,199	3,659,155	5,018,354

Some interesting statistics relative to the value and the cost of the traffic passing through the Canadian and the U.S. canals at Sault Ste. Marie, are given in the Blue Book of American Shipping for 1907. The figures relate to the traffic for the season of navigation of 1906. The estimated value of the freight was $537,227,650, the principal items being: Iron ore, $121,981,795; wheat, $67,417,086; grain, other than wheat, $38,583,640; copper, $36,595,220; manufactured iron, $29,614,880; flour, $27,280,470;

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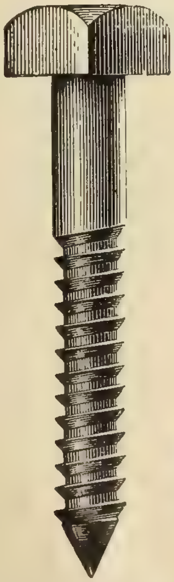

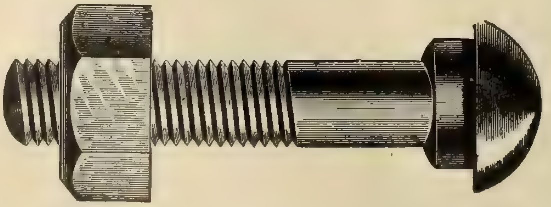

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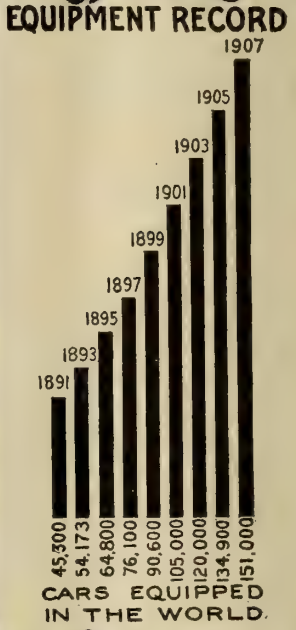

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The following commerce passed through the Sault Ste. Marie canals in December, 1907:

ARTICLES.			CANADIAN CANAL.	U.S. CANAL.	TOTAL.
Copper	Eastbound	Net tons	....	11,647	11,647
Grain	"	Bushels	1,370,807	2,716,248	4,087,055
Building stone	"	Net tons	....	....	....
Flour	"	Barrels	50,324	310,320	360,644
Iron ore	"	Net tons	7,504	141,942	149,446
Iron, pig	"	Net tons	2,016	1,370	3,386
Lumber	"	M. ft. B.M.	67	4,495	4,562
Wheat	"	Bushels	4,675,589	8,799,407	13,474,996
General merchandise	"	Net tons	263	1,200	1,463
Passengers	"	Number	73	91	164
Coal, hard	Westbound	Net tons	....	67,900	67,900
Coal, soft	"	Net tons	48,800	284,713	333,513
Flour	"	Barrels	....	....	....
Grain	"	Bushels	....	....	....
Manufactured iron	"	Net tons	2,913	999	3,912
Salt	"	Barrels	....	405	405
General merchandise	"	Net tons	7,139	7,636	14,775
Passengers	"	Number	34	37	71
FREIGHT—Eastbound		Net tons	184,918	526,567	711,485
" Westbound		Net tons	58,852	361,309	420,161
Total freight		Net tons	243,770	887,876	1,131,646
Vessel passage		Number	121	192	313
Registered tonnage		Net	156,449	481,218	637,667

coal, hard and soft, $25,136,044; lumber, $19,813,882; pig iron, $387,002; salt, $351,121; building stone, $74,661. The miscellaneous and unclassified freight was valued at $170,227,650. Miscellaneous statistics: Total mile tons, 43,596,953,680, against 36,892,797,973 for the season of 1905; total cost of transportation $36,666,889, against $31,420,584.54; cost of carrying per mile ton, .084 cents, against .085 cents; average distance freight was carried 842.4 miles, against 833.3 miles; value of U.S. vessels engaged in the trade $88,392,000 against $73,211,300; value of Canadian vessels engaged in the trade, $6,140,500, against $5,429,000; proportion of freight carried by Canadian vessels, 5%, the same as in 1905, and 6% in 1904 and 1903.

Statistical report of commerce passed through the Sault Ste. Marie canals season of 1907:

ARTICLES.			CANADIAN CANAL.	U.S. CANAL.	TOTAL.
Copper	Eastbound	Net tons	15,657	74,302	89,959
Grain	"	Bushels	22,422,057	21,039,129	43,461,186
Building stone	"	Net tons	220	678	898
Flour	"	Barrels	3,118,448	3,406,072	6,524,520
Iron ore	"	Net tons	10,073,911	29,521,033	39,594,944
Iron, pig	"	Net tons	10,236	10,170	20,406
Lumber	"	M. ft. B.M.	48,606	600,714	649,320
Wheat	"	Bushels	49,293,499	48,842,276	98,135,775
General merchandise	"	Net tons	64,407	41,668	106,075
Passengers	"	Number	16,733	14,977	31,710
Coal, hard	Westbound	Net tons	245,240	1,261,428	1,506,668
Coal, soft	"	Net tons	2,256,759	7,636,668	9,893,427
Flour	"	Barrels	....	250	250
Grain	"	Bushels	589	1,563	2,152
Manufactured iron	"	Net tons	94,307	193,228	287,535
Salt	"	Barrels	70,959	989,843	460,802
General merchandise	"	Net tons	433,350	483,229	916,579
Passengers	"	Number	13,150	17,898	31,048
FREIGHT—Eastbound		Net tons	12,545,560	32,998,759	45,544,319
" Westbound		Net tons	3,039,808	9,633,087	12,672,895
Total freight		Net tons	15,585,368	42,631,846	58,217,214
Vessel passages		Number	6,346	14,091	20,437
Registered tonnage		Net	12,086,864	32,001,110	44,087,974

Comparative statement of commerce passed through the Sault Ste. Marie canals, seasons of 1906 and 1907:

ITEMS.		TOTAL TRAFFIC.		CHANGE.	
		1906	1907	Amount	Per Cent.
VESSELS—					
Steamers	Number	18,138	17,245	893	— 5
Sailing	Number	2,817	2,303	514	—18
Unregistered	Number	1,200	889	311	—26
Total	Number	22,155	20,437	1,718	— 8
Lockages	Number	14,523	14,020	503	— 3
TONNAGE—					
Registered	Net	41,098,324	44,087,974	2,989,650	7
Freight	Net	51,751,080	58,217,214	6,466,134	12
Passengers	Number	63, 33	62,758	275	....
COAL—					
Hard	Net tons	1,011,375	1,506,668	495,293	49
Soft	Net tons	7,728,255	9,893,427	2,165,172	28
Flour	Barrels	6,495,350	6,524,770	29,420	....
Wheat	Bushels	84,271,358	98,135,775	13,864,417	16
Grain	Bushels	54,343,155	43,463,338	10,879,817	—20
Manufactured and pig iron	Net tons	391,105	307,941	83,164	—21
Salt	Barrels	468,162	460,802	7,360	— 2
Copper	Net tons	107,633	89,959	17,674	—16
Iron ore	Net tons	35,357,042	39,594,944	4,237,902	12
Lumber	M. ft. B.M.	900,631	649,320	251,311	—28
Building stone	Net tons	6,222	898	5,324	—86
General merchandise	Net tons	1,134,851	1,022,654	112,197	—10

The U.S. canal was opened April 23, and closed Dec. 11, 1907; season, 233 days.
The Canadian canal was opened April 22, and closed Dec. 15, 1907; season, 238 days.

The Chargeurs Reunis Steamship Line.

This French line, which owns a fleet of 41 vessels aggregating 161,674 tons, running round the world, will, early in the year, make considerable changes in the route, in addition to building five more ships. At present the route from Great Britain to Canada, via Yokohama, includes calls at Honolulu, San Francisco and Puget Sound, but it is understood that in the future the run from Japan will be direct to Victoria, B.C., afterwards calling at Vancouver, and from there to Puget Sound ports, continuing the homeward journey as usual, via South America ports and the straits of Magellan. Of the five new vessels to be constructed, one, the Malte, was launched on the Tyne, Eng., recently, and three others, Ceylon, Ouessant and Corse, are on the stocks there. The general dimensions of the vessels are given as: Length, 480 ft.; breadth, 60 ft.; depth, 37 ft.; with a draught of about 26 ft. The boats are on the three-deck principle, and the holds have a capacity of about 420,000 cubic feet. The holds and spar decks are supplied with all improvements and appliances for facilitating the rapid loading and discharging of cargo. There are ten large hatches, with 18 steam winches, and 21 derricks (one 40-ton, four 10-ton and sixteen 6-ton capacity). The machinery consists of two sets of triple expansion engines, each driving a four-bladed propeller and capable of 3,400 h.p., or 6,800 in all, of which only 5,000 h.p. will be utilized to maintain a speed of 12½ knots, with an average deadweight of 9,000 tons. First-class accommodation, consisting of 16 staterooms with two berths each, and 25 cabins with single berths, is provided on three decks in the centre of the ship, with dining-room, drawing-room, music-room, library, etc. They are lighted throughout with electricity, and are supplied with refrigerating machinery.

The Steamship Dunelm.

The Dunelm Co.'s new steamship Dunelm arrived in Montreal harbor Dec. 13, having occupied 33 days on her maiden trip from Middlesbrough, Eng. The Montreal Harbor Commission, which dates from 1824, has no record of any vessel reaching the port after Dec. 1 during the winter seasons, so that the Dunelm's feat can be taken as a record. Sailing from Middlesbrough, Nov. 10, heavy weather was encountered almost from the first, and the passage round the north of Scotland and Ireland was made worse by the shifting of a part of the cargo of pig iron, which had been stored 'tween decks, and which had to be placed in the hold. Sydney, N.S., was reached Dec. 5, where, after coaling, she proceeded to Quebec, where she arrived Dec. 9. This part of the voyage was accomplished without much difficulty, though ice was encountered between Father Point and Quebec. The last part, between Quebec and Montreal, was considerably more dangerous, the buoys having all been removed. The Government tug Frontenac preceded the Dunelm, which was in charge of two pilots for a portion of the journey across Lake St. Peter, breaking up the ice there and at the entrance to the harbor.

The Dunelm, which was built in Sunderland, Eng., is a twin-screw steamer, with a speed of about 12 knots an hour. Her dimensions are: Length, 250 ft.; breadth, 43.1 ft.; depth, 26.6 ft.; tonnage, 2,319 gross, 1,481 register. After discharging cargo, she was berthed at Montreal for the winter, and on the re-opening of navigation, will be placed on the run between that port and Fort William, Ont., under the management of R. O. & A. B. Mackay, of Hamilton, Ont.

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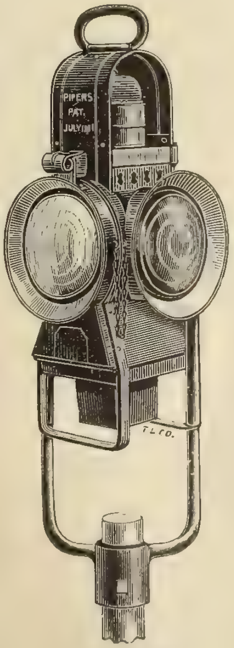

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Piper's SIDE CAR LAMP

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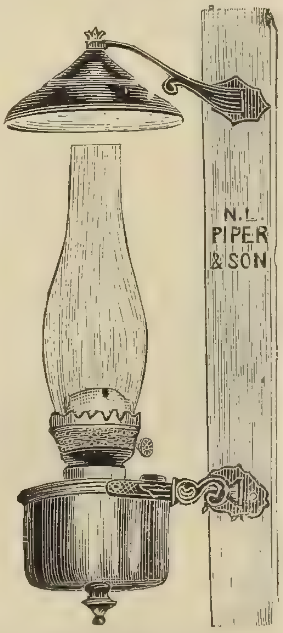

Write for No. 5 Catalogue of Railway Signals and Supplies.

SUBMARINE SIGNALS

Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says:

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Full Particulars on Application to the

Submarine Signal

COMPANY

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Registration of British Vessels.

The Dominion Department of Marine has issued the following notice, respecting the registration of British vessels in Canada: "Any person who proposes to make application for the registry of a British ship shall give notice in writing of the proposed name of the ship to the registrar of shipping at the intended port of registry at least 14 days before the date in which it is contemplated to effect the registry. The registrar will immediately upon receipt of such application submit it to the Department of Marine and Fisheries for approval, and no registrar shall register or proceed to register any vessel without the previous written authority of the Department of Marine and Fisheries. This regulation goes into force Jan. 1, 1908."

Export Statistics from Montreal.

The exports of produce from the port of Montreal in 1907 shows some considerable changes from those of 1906, the increase in grain shipments being the most striking. Following is a comparative statement:

	1907	1906
Wheat, bush	21,018,529	14,289,551
Corn, bush	4,766,024	4,438,283
Peas, bush	131,218	160,902
Oats, bush	3,848,415	2,977,011
Barley, bush	803,784	923,911
Rye, bush	128,403	134,287
Buckwheat	47,741	103,915
Flaxseed, bush	1,276,902	2,926,016
Flour, brls	861,936	703,211
Meal, brls	57,915	61,164
Eggs, cases	28,160	64,978
Butter, boxes	64,362	358,870
Cheese, boxes	1,975,923	2,192,287
Lard, brls	351,240	357,286
Hams and bacon, pkgs	55,300	63,862
Meats, pkgs	144,020	165,606
Apples, barrels	585,554	369,655

Atlantic and Pacific Ocean Marine.

A fire in the Manchester Steamship Line's gear shed on the wharf at the foot of Beaudry St., Montreal, recently, destroyed about $2,000 worth of stores.

The C.P.R. steamship Empress of Ireland arrived at Liverpool Dec. 6, making the trip from Halifax, N.S., in 4 days, 19 hrs., thus showing that for trans-Atlantic mail purposes, a distinct advantage rests with the Canadian route.

Dr. R. C. Ruddick, who has been appointed quarantine officer for the port of St. John, N.B., to succeed the late Dr. March, was presented with a gold watch by the residents of St. Martins, N.B., recently, on leaving to take up his new duties.

The Cunard Line S.S. Mauretania grounded in the Mersey, opposite the Prince's landing stage, Liverpool, Eng., Dec. 13, and was refloated without any damage. The accident was caused by the anchors dragging as the boat swung round to the tide.

The Kosmos Line recently announced that it had made arrangements with the Panama Rd., and with a steamship line connecting with the Atlantic side of the isthmus, for a regular quick service with Pacific ports, by railway transfer across the isthmus.

A press report states that after the present winter season, H. and A. Allan will open an office of their own in St. John, N.B., and handle their business at that port themselves, instead of through agents. A building has, it is said, been secured for this purpose.

The record for steaming capabilities has been achieved by the British torpedo boat destroyer Tartar, which, at her recent trials, steamed at the rate of 37 knots an hour over a short course, and on a six-hour run, maintained a speed of 35.952 knots an hour.

In an article dealing with expenditures on board large ocean-going steamships, an English paper gives the approximate receipts and expenses of the Lusitania and Mauretania, in a single voyage, as $155,950 and $89,650, thus showing a profit of $66,300 on each trip.

It is anticipated that the subsidy paid by Canada to the Union Steamship Co. of New Zealand, on account of the Canada-Australia mail contract, amounting to $180,000, will not be renewed, as the amount has not been provided for in the parliamentary estimates for next year.

The Thomson Line steamship Kildona, from North Shields, Eng., to Portland, Me., ran on the Brazil rock, near Cape Sable, N.S., Dec. 15, and was completely broken up within 48 hours. The crew was removed in the steamship Louisburg. The Robert Reford Co. are agents for the Thomson Line.

Rumor is still busy as to the intentions of the C.P.R., regarding the provision of additional vessels for either its Atlantic or Pacific service. The last report was to the effect that the Cunard liners Etruria and Umbria had been acquired for the Pacific, but this was met with a prompt denial by the Cunard Co.

The Dominion Steamship Line, during the St. Lawrence route season recently closed for the winter, carried: saloon, 733; second cabin, 7,345; third-class, 24,737; total, 32,815 passengers westward, against saloon, 626; second cabin, 5,503; third-class, 19,606; total, 25,735 passengers for the same period, 1906.

A press report states that D. E. Brown, General Superintendent C.P.R. Pacific steamship service, and formerly the company's general agent at Hong Kong, has resigned in order to engage in a private shipping business, and that W. T. Payne, heretofore general traffic agent C.P.R., Japan, has succeeded him.

Several of the large fish shippers of St. John's, Nfld., are considering the introduction of a new system of shipping to Europe, especially to Mediterranean ports. Negotiations are said to be in progress with a firm in England regarding the establishment of a line of steamships to be inaugurated with the fish-shipping season of 1908.

The Cunard Line steamship Mauretania, on Dec. 5, arrived at Queenstown, Ireland, having completed the voyage from Sandy Hook in 4 days, 22 hrs., 29 mins., thus beating the Lusitania by 21 mins., and creating a world's record between these two points. She occupied 5 days, 8 hrs. in the journey from Sandy Hook to Liverpool.

In the course of a speech at the Liberal Colonial Club, London, Eng., Dec. 3, Hon. Clifford Sifton stated that time occupied on a voyage by the proposed "All-red" route, would be: London to Canada, 5 days; to Vancouver, B.C., 8½ days; and to New Zealand, 25 days; instead of as at present, 7, 12 and 38 days respectively.

In the action of the Thomson Steamship Line against the Allan Steamship Line, for damages sustained by the steamship Hurona in a collision with the Mongolian in the Gulf of St. Lawrence, towards the end of last year, judgment was delivered that the parties concerned were equally blamable, and the action dismissed, each party paying its own costs.

At the recent international conference of the Maritime Employers' Federation, held in London, Eng., steps were taken for the inauguration of a federation of tramp freighters throughout the world. Reports are being prepared detailing conditions of labor in all maritime countries, with a view to aiding employer and employed to arrange wage and other matters, and to facilitate dealing with all matters in their common interest.

It is reported that Holt & Co., the owners of the Blue Funnel Line, on the Pacific, are to add five new vessels to their fleet, and that the contract for three of them has been placed in Belfast, Ireland. The new vessels, it is stated, are intended for the Hong Kong-Victoria, B.C., service. The Blue Funnel Line consists at present of 55 vessels, running a weekly service between Great Britain and the Orient, and monthly to Victoria, B.C., in addition to other routes. The dimensions of the new vessels are given as: Length, 440 ft.; breadth, 52 ft.; depth, 35 ft.

The C.P.R. steamship Mount Royal, from Antwerp, was considerably overdue at St. John, N.B., Dec. 31, and up to that date had not been reported at any point. The company's officials were beginning to entertain fears for the safety of the passengers. The Mount Royal is one of the vessels acquired by the C.P.R. from the Elder-Dempster Co., and was built at Newcastle, Eng., in 1898. Her dimensions are: length, 470 ft.; breadth, 56 ft.; depth, 32 ft., and she has triple expansion engines with cylinders 28, 46 and 75 ins. diam., by 54 ins. stroke, and 505 n.h.p.

The Allan Steamship Line carried the following number of passengers in its vessels from May 1 to the closing of the St. Lawrence route for the winter, in Nov., 1907. Westward, saloon, 3,276; second cabin, 19,088; third-class, 35,580; total, 57,944; eastward, saloon, 3,177; second cabin, 15,534; third-class, 9,151; total, 27,862; against saloon, 3,177; second cabin, 15,534; third-class, 29,181; total, westward, 47,892; and saloon, 2,159; second cabin, 3,911; third-class, 6,244; total eastward, 12,314 for similar period of 1906. The increase in the number of passengers carried in 1907 over that of 1906 was about 8%, and is the highest total yet reached by the company.

An extraordinary general meeting of the shareholders of Furness, Withy & Co., Ltd., West Hartlepool, Eng., was held recently for the purpose of increasing its capital in order to acquire the fleets of the British Maritime Trust, Ltd., and the Chesapeake and Ohio Steamship Co., Ltd. When this is accomplished the company will own 86 steamships, have a controlling interest in 35, and partly own 55, making a total of 176 vessels, aggregating 504,582 tons, and being over £3,000,000 in value. The two fleets mentioned consist of 39 modern steamships and the purchase price is £1,606,900. The capital of the company is £2,000,000, and sanction was sought to increase it to £3,500,000, by the issue of 800,000 shares of £1 each, and 70,000 preference shares at £10 each, both ranking pari passu with existing shares. It was estimated that the acquisition of the boats in question will augment the company's profits by £150,000 a year. Furness, Withy & Co., Ltd., runs a regular service between London, Eng., and Halifax, N.S., and the company manages Manchester Liners, Ltd., of which it is part owner.

The Canadian-Mexican Steamship Co., Ltd., is credited with the intention of arranging a new steamship service between Great Britain and British Columbia, with Victoria as the port. The company operates the steamships Lonsdale and Georgia and other vessels, in conjunction with the Harrison Line of Liverpool, Eng., and at present maintains a weekly service between Liverpool and Puerto Mexico. The scheme the promoters have in mind is one which, if carried through, will give a much faster service between Great Britain and British Columbia than has hitherto been accomplished. It is the intention to run the vessels to Puerto Mexico, the Atlantic terminus of the Tehuantepec Rd., where freight will be unloaded by electrical conveyors, and carried across the isthmus to Salina Cruz, the Pacific terminus of the same railroad, where it will be placed on other vessels for B.C. ports, where it can be landed within five weeks of leaving Liverpool, and through bills of lading will be supplied. The Harrison Line fleet consists of 38 steamers, with a tonnage of 186,000, and comprises the

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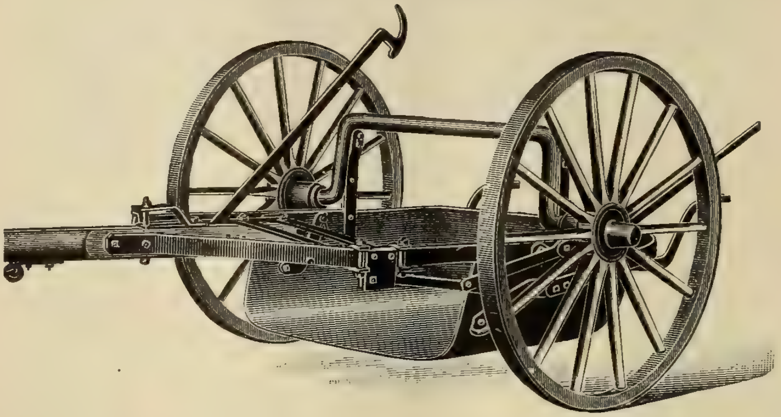

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Charente Steamship Co., which runs to various ports of the two Americas, Africa and France.

The C.P.R. steamship Mount Temple, from Antwerp to St. John, N.B., with 732 passengers, ran on the rocks at Ironbound Island, at the mouth of the La Have River, near Bridgewater, N.S., Dec. 3, and will probably be a total loss. The whole of the passengers and crew were transferred to shore without accident, and the cargo has been salved. The Mount Temple is a four-masted, twin-screw steamer of 9,000 tons; she was built in 1901, at Newcastle-on-Tyne, Eng., for the Elder-Dempster Co., and was engaged as a transport for horses during the South African war. She was acquired by the C.P.R. in 1903, since when she has been on the Antwerp-London-Canada run with the exception of one season, when she was placed on the Liverpool-Montreal route. The Dominion Minister of Marine has directed Judge Wallace, of the Halifax County Court, to act as special commissioner to hold a formal investigation into the cause of the wreck, and has appointed Capts. N. Hall and Seeley to act with him as nautical assessors. The C.P.R. chartered the Donaldson Line Steamship Cassandra to sail from St. John, Dec. 14, in place of the Mount Temple.

Maritime Provinces and Newfoundland.

E. E. Phillips, a former coast captain, died at Yarmouth recently, aged 64.

J. W. Odell, formerly a well-known captain in the West Indies trade, died at Digby, N.S., recently, aged 74.

The schooner Champion, owned in Halifax, ran ashore at Scatarie Island, Dec. 5, and became a total loss. One of the crew was drowned.

Capt. J. O'Leary, commander of the Government steamboat Tyrian, was killed while crossing the Intercolonial Ry. track at Halifax, N.S., recently

D. Myers, one of the oldest master mariners in Nova Scotia, while engaged in mooring his vessel at the wharf at Canso, N.S., during a storm, fell overboard and was drowned, Dec. 1.

P. Johnson, who has been in command of the Dominion Government steamship Lady Laurier ever since she has been in commission, has been appointed Inspector of Lighthouses for Nova Scotia.

Referring to recent reports to the effect that a steamship service between Port Wade and St. John, N.B., was to be established by the Mackenzie, Mann interests, we are advised the matter has not yet been decided upon.

The brig Lady Napier, of Georgetown, P.E.I., while running for shelter during a storm, ran ashore near St. John, N.B., Dec. 1. She will be lightened and refloated, as practically no damage has been sustained.

The steamship Amherst, which has been remodelled and supplied with new machinery, has passed inspection, but it is stated will not go into service until the spring. She will be berthed at Halifax or Louisburg for the winter.

The S.S. Senlac, which collided with the Rosalind recently, has completed her repairs, and resumed her place on the South Shore route. Several of her staterooms have been removed, as she is in future to be used chiefly as a freight boat.

Press reports state that the steamships Yale and Harvard, controlled by the New York, New Haven and Hartford Ry., will take up routes between St. John, N.B., and Boston, and Halifax, N.S., and New York, respectively, next summer.

The Reid-Newfoundland Co.'s wrecking steamboat Petrel, which has been undergoing a considerable overhauling, had a successful trial trip recently. She has been, practically, re-boilered and refitted throughout, and has been supplied with a 70-ton crane.

Capt. W. McDonald, Souris, has been appointed receiver of wrecks for the district extending from East Point to Little Sands, P.E.I.: J. W. Ellis, Victoria Beach, wharfinger at Battery Point, N.S., and T. W. Brooks, wharfinger at Freeport, N.S.

The crib of the new wharf at St. John, N.B., was floated into its place and anchored, Dec. 5. This enabled the Allan Line vessels to occupy their own berths instead of using the C.P.R. berths, as they were compelled to do at the commencement of the winter season.

Notice of a resolution was given in the House of Commons, Dec. 17, asking the Government to secure for the Dominion the cancellation of coasting privileges now enjoyed by foreign countries, whether these privileges have been granted by Imperial treaty or by courtesy of the Government.

The Whitman Fish Co.'s steamboat J. B. Hamblen took fire and was completely destroyed, at Canso, N.S., Dec. 3. She was built at Providence, R.I., in 1891, was a screw steamer with engine of 40 n.h.p., and her dimensions were: Length, 68.2 ft.; breadth, 14.6 ft.; depth, 5.3 ft.; tonnage, 32 gross, 22 register.

The Dominion Coal Co.'s S.S. Coban ran on the rocks at Black Point, Dec. 2, and was refloated Dec. 4, five tugs in addition to the company's boats, Cacouna and Cabot, being engaged in the task. She proceeded under her own steam to Halifax, accompanied by the tug Douglas H. Thomas, where she will be drydocked and examined.

The St. John's, Nfld., steamboat Kite, which was taken up to Grand River recently, for the purpose of bringing back the steamboat Aid, which ran ashore there some time ago, has returned with the information that the Aid is completely frozen in, and will have to remain there until spring, when efforts will be made to tow her to St. John's for repairs.

The Dominion Government S.S. Montcalm, which was on her way to Point au Maurier to bring away the operators and instruments from the Marconi station, ran ashore there recently, tearing three large holes in her hull. She was towed back by the S.S. Lord Strathcona, and docked at St. Joseph de Levis, Que., where it is hoped to complete the necessary repairs in order to enable her to take up her winter's work.

It is reported that the Bras d'Or Steamboat Co. will build or purchase a steamboat to replace the Weymouth on the Northern Victoria route. The new vessel, it is stated, is to have specially adapted accommodation for passengers and freight, and J. J. Moffatt, Manager of the company, will, it is said, leave shortly for Great Britain with a view to securing a vessel in time for the opening of navigation next spring.

At the commencement of the winter port season, the longshoremen at St. John, N.B., declined to resume work at last winter's rate of pay, viz., 30 cents an hour, but demanded 40 cents. The companies concerned declined to comply with the demand, and prepared to carry out the work usually done by the longshoremen, by utilizing the ships' crews, and importing men from Montreal. The whole matter was, however, compromised on Dec. 3, by arranging for increased pay on the basis of 32½ cents an hour.

The Winterport Coal Mining Co., Ltd., has been incorporated under the New Brunswick Companies Act, with a capital of $99,000, with power to acquire certain lands in the province, and the business carried on as the Winterport Coal Mines, and in connection therewith to construct and operate tramways, construct wharves, piers, docks, etc., and to construct, purchase or otherwise acquire, and operate steam and other vessels for the purposes of transportation of freight of all kinds. The provisional directors are: J. S. Gibbon, C. S. Gibbon, W. E. Vroom, N. S. Springer, St. John; and C. M. Larkin, Newcastle, N.B.

The Dominion Government steamship Stanley arrived at Charlottetown, P.E.I., Dec. 1, from Glasgow, Scotland, where she had been for six months undergoing a thorough overhauling by her builders. The captain reported very heavy weather. When only 120 miles from Ireland he had to put back owing to leaking condensers and choked bilge pumps. The Stanley has been re-boilered, her hull has been strengthened, the saloon remodelled and enlarged, and several new cabins provided. She has been placed on her winter route, making alternate trips with the steamship Minto between Prince Edward Island and the mainland.

The Dominion Atlantic Ry. Co.'s S.S. Yarmouth, which ran aground on Black Point, Dec. 9, floated at high tide, and arrived at St. John, N.B., under her own steam, though she was leaking very badly. It is expected that temporary repairs will be undertaken at St. John, to enable her to be taken to Halifax, where she will be overhauled. In the meantime the Prince Rupert will replace her. The Yarmouth was built at Dumbarton, Scotland, in 1887. Her dimensions are: Length, 220.3 ft.; breadth, 35.2 ft.; depth, 21 ft.; tonnage, 1,452 gross, 725 register; with engines of 260 n.h.p. She was originally owned by the Yarmouth Steamship Co., and has been on the Yarmouth-Boston route for 20 years.

Province of Quebec Marine.

J. G. Martin, who for 25 years has been light-keeper at Metis point, was presented with the long service medal recently.

Tenders are under consideration of the Dominion Public Works Department for the construction of a wharf at L'Anse à la Barbe.

The Richelieu and Ontario Navigation Co.'s steamboat Ste. Irenée from Quebec to Sorel, met with an accident to one of her wheels recently near La Pierre Island, Lake St. Peter, and was towed to Sorel.

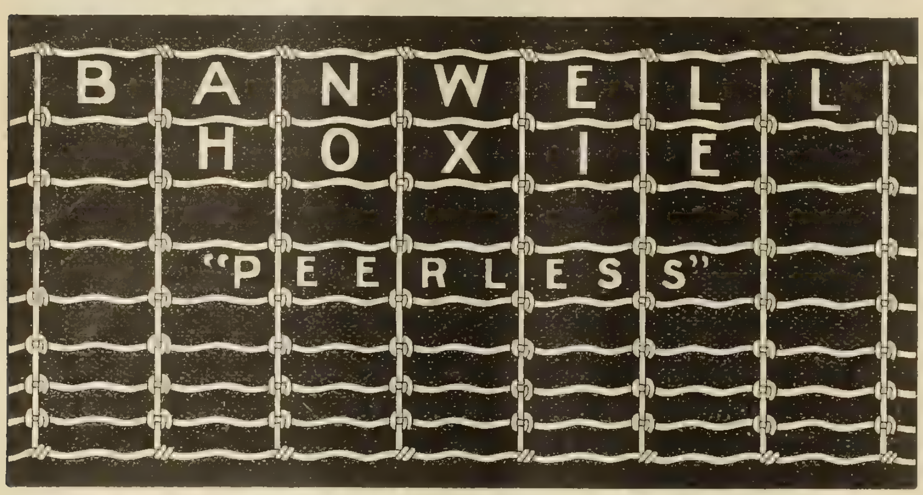
The steamship Nancy Lee, while anchored at Point-des-Roches, dragged her anchor under pressure of floating ice and grounded in the Saguenay river recently. She floated with the rising tide, without any damage having been sustained.

The S.S. Christian Knudsen, from Montreal to Sydney, N.S., struck a sunken ledge at the Traverse recently, and returned to Quebec, where she was examined. Her tanks were full of water, but it is anticipated that the damage is inconsiderable.

In answer to a question in the Senate, Dec. 10, respecting the accommodation at the Levis grading dock, which is said to be too narrow for boats of the Empress type, it was stated that the matter was engaging the serious attention of the Public Works Department.

The steamboat Ste. Croix has been docked near the Dorchester bridge, River St. Charles, where it is intended to lengthen her by 25 ft. during the winter. She was built at St. Nicholas, in 1880, her dimensions being: length, 125.1 ft.; breadth, 26 ft.; depth, 8.6 ft.; tonnage, 506 gross, 318 register; driven by paddles, with engine of 30 h.p.

The Dominion Sand and Stone Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $20,000 and offices at Montreal, to carry on the business of dealers in sand, stone, etc.; to own quarries, and to acquire and operate steam and other vessels in connection therewith. The provisional directors are; T. Craig, W. B.



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Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian (generally)	8.00 " "
Map No. 5—Calgary District	8.00 to 10.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—Range 11 West, 4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan and Eastern Alberta, 3rd Meridian to Range 10 West, 4th Meridian	10.00 to 25.00 per acre.

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160 Acres at	$ 8.00 per acre, cash payment	$191.70 first year's interest	$65.28 and nine instalments of	$160.00
" "	9.00 " "	215.70 " " "	73.46 " "	180.00
" "	10.00 " "	239.70 " " "	81.62 " "	200.00
" "	11.00 " "	263.60 " " "	89.78 " "	220.00
" "	12.00 " "	287.60 " " "	97.96 " "	240.00
" "	13.00 " "	311.55 " " "	106.10 " "	260.00
" "	14.00 " "	335.60 " " "	114.32 " "	280.00
"	15.00 " "	359.50 " " "	122.44 " "	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

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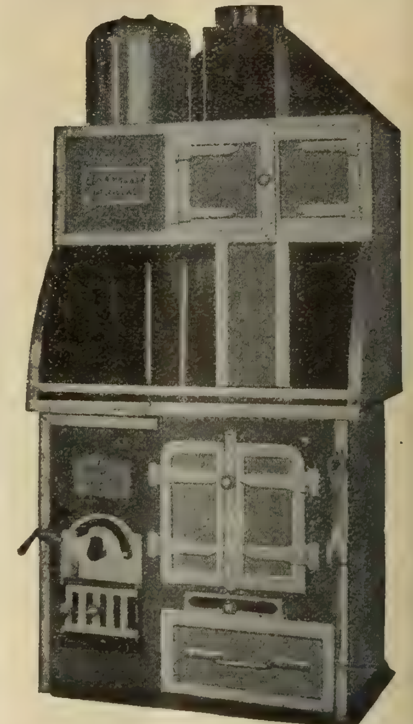

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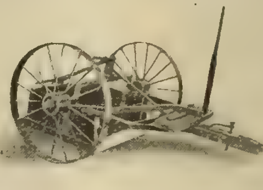

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Powell, J. A. Burnett, J. W. Craig, and J. Durand, Quebec, Que.

The Montreal Harbor Commissioners entertained the members of the Harbor permanent staff to dinner, Dec. 1. In the course of the evening, F. W. Cowie, Chief Engineer of the Commission, gave a review of the development of the harbor from 1824, and Col. Gourdeau, on behalf of the Department of Marine, expressed his satisfaction with the Commission's harbor work during the time the members had been in office.

Niquet et Frère, owners of the steamboat Florida, operating between Montreal and Pierreville on the St. Francis River, a distance of about 60 miles, have arranged, it is reported, to build another boat at Sorel, to replace their present one. The new boat, it is stated, will be 125 ft. long, 22 ft. beam, and will have accommodation for about 100 passengers in addition to cargo. Her speed will be about 14 miles an hour.

The Montreal Board of Trade in memorializing the Canadian section of the International Waterways Commission, in regard to the proposed damming of the St. Lawrence River in the interests of power companies, contends "that no matter what advantages in the shape of power and light may accrue as the result of those works to the towns, corporations or individuals on either side of the river, the interests of navigation are paramount, and that they should not be sacrificed for any cause whatever."

A petition has been presented by A. Labrecque, director of the company, and an order made, for the liquidation of the Canadian St. Lawrence Navigation Co., Ltd. A. Desmarteau, Montreal, has been appointed provisional liquidator, with power to borrow sufficient money to place the company's vessels in winter quarters and pay off the crews. The three boats owned by the company are Sovereign, also known as Imperial; Colonial, also known as White Star, and Prefontaine. The Sovereign collided with the barge Germaine Aug. 23, in Montreal harbor, and in the subsequent enquiry it was held that the Sovereign, her master and owners, were responsible for the sinking of the barge. Writs of seizure were subsequently taken out by the owner of the barge, who claimed $5,500, and by the owner of the cargo, who claimed $500.

Ontario and the Great Lakes.

The steam barge Resolute, which was sunk in Toronto Harbor about a year ago, has been raised.

Tenders were received recently by the Toronto Board of Control for the building of a steel hull for a launch.

The Niagara Navigation Co. has declared a dividend of 4% for the half-year just concluded, being at the rate of 8% for the year 1907.

Tenders are being invited by the Department of Railways and Canals, for the works connected with the construction of section 2, Ontario-Rice Lake division of the Trent Canal.

The U.S. steamboat Lizzie Madden, bound from Bay City to Little Current, Ont., was destroyed by fire in Lake Huron recently. She was valued at $25,000 and was partly insured.

W. M. Lambert, ex-lighthouse keeper at Chantry Island, was, at a meeting of the Southampton town council, Dec. 9, presented with the Imperial service medal for faithful service.

The steamboats Wassaga and Wahcondah grounded on Round Island during a fog, Dec. 10, and were released without injury by the tug General.

The Dominion Government is said to contemplate the construction of a second canal on the Canadian side, at Sault Ste. Marie. The work it is estimated would cost about $5,000,000, and occupy about five years.

J. C. Boyd, Superintendent of the Sault Ste Marie Canal, who was recently transferred to Morrisburg, Ont., was presented with a gold watch and an address by the Free Masons at Sault Ste. Marie, Dec. 3.

Hon. W. Pugsley, Minister of Public Works, stated in the Dominion House, Dec. 11, that an amount had been provided in the estimates, for the work on the western entrance to Toronto Harbor, and that it was estimated the work would occupy about three years.

At the recent annual general meeting of the Hamilton Steamboat Co., Æ. Jarvis was elected President; H. G. Nicholls, Vice-President; and A. Bruce, K.C., H. B. Witton, C. E. A. Goldman, A. A. Angstrom, and C. E. Bishop, directors for the current year.

W. Mitchell, one of the pioneers of the Great Lakes, and at one time captain and part owner of several tugs engaged in the towage of logs from the Canadian side of the lakes, and which the Canadian Government eventually prohibited, died at Bay City, Mich., Dec. 17.

A bill was introduced into the U.S. Legislature, Dec. 9, to appropriate $1,250,000, to defray the cost of a survey and right-of-way for a ship canal to connect Lakes Ontario and Erie, the channel to be large enough to accommodate the largest vessels now in use on the Great Lakes.

The Kingston Shipping Co., Ltd., has, it is said, placed an order for the construction of a vessel in England, which it is hoped to have in the service early in the year. The company has been incorporated recently, some of the directors being members of the Calvin Co., Garden Island.

The license granted to P. T. Roberts, for the running of a ferry between Rainy River, Ont., and Beaudette and Spooner, Minn., across the Rainy River, has been cancelled by order-in-council, and instructions issued that the fee of $100 paid as rent for one year to May 1, 1908, be refunded him.

W. Bishop and E. Callaghan, General Manager and Toronto Agent respectively of the Hamilton Steamboat Co., were each presented recently with a gold watch by the Toronto Police Amateur Athletic Association, in recognition of the indebtedness of the latter to them for services during the year.

A Cleveland, Ohio, steamboat was chartered to load grain at Fort William, Dec. 10, but as the insurance companies would not extend the insurance, the bondholders would not allow her to sail, and were prepared to resort to extreme measures were any attempt made to do so without carrying an insurance.

The water levels in the Great Lakes for Nov. were as follows, the figures being feet above tide water: Superior, 602.87; Michigan, 580.79; Huron, 580.79; Erie, 572.37; Ontario, 246.26. During December there was a general lowering in all the lakes, but altogether, the levels are above the average for similar periods during the past ten years

The steam barge Reliance owned by the Rathbun Co., Deseronto, has been sold to Hepburn Bros., Picton, Ont.; the price paid, it is stated, was $5,000. The Reliance was taken to Picton Dec. 11, and will be used for the coal trade on the Bay of Quinte. She was built at Deseronto in 1881, and is a screw steamer, with engine of 134 n.h.p.; her dimensions are: Length, 120 ft.; breadth, 23.5 ft.; depth, 9 ft.; tonnage, 239 gross, 169 register.

An application will be made during the present session of the Dominion Parliament for an act incorporating the Dominion Transportation and Storage Co., with power to build, purchase, own and operate steamships, elevators, docks, etc., in connection with a general transportation business. D. McGillivray, J. W. Norcross, Port Colborne; W. E. Phin, Welland; J. Battle, Thorold, Ont., and R. M. Wolvin, Duluth, Minn., are the interested parties.

A plan to connect Pittsburg, Pa., with Lake Ontario, by means of a canal, was outlined, Dec. 17, before a joint meeting of representatives from the Rochester, N.Y., and Pittsburg, Pa., Chambers of Commerce. The idea is to construct a 12 ft. waterway with mechanical lift-locks, and 50-ft dams, suitable for barges of 1,200 tons. The route mentioned is, via the Alleghany River to Olean, N.Y., thence to Cuba down the Genessee River, past Rochester to the lake.

Lewis and Smith, Ltd., Toronto, has been incorporated under the Dominion Companies Act, with a capital of $100,000, to carry on the business of electrical, mechanical and civil engineers and contractors, and to construct bridges, buildings, machinery, ships, engines, cars, and other equipment, tunnels, subways, docks, viaducts, aqueducts, canals, and other means of transportation. H. Lewis, H. W. Wilcox, C. M. Doolittle, T. C. Haslett, A. L. Scott, Hamilton, Ont., are the provisional directors.

W. L. Parish, Mayor of Port Perry, Ont., had an interview with the Minister of Railways and Canals, Dec. 6, with reference to the low water in Lake Scugog, which interferes with navigation there. It is alleged that the Flavelle Co., of Lindsay, which was granted certain water privileges in 1843, is using a greater quantity of water than it is entitled to do, and an enquiry, and if necessary a restriction of the privilege, is asked for. The dam and locks at Lindsay, formerly owned by the Ontario Government, and now forming a part of the Trent Valley Canal system, have been taken over by the Dominion Government.

Manitoba, Saskatchewan, Alberta, Etc.

E. T. Case has been elected Vice-President of the Winnipeg, Winnipegosis and Cumberland Steamship Co.; and J. F. O'Callaghan has been appointed General Manager to succeed J. K. McKenzie.

An order-in-council was passed recently, which approved of the location and reservation as a public highway, of a roadway constructed from the plant of the Winnipeg Electric Ry., via Pinawa channel, to the Winnipeg River, near Lac du Bonnet, Man. Some time ago the company signified its intention of widening the navigable channel of the river at this point, and subsequently the city council proceeded with the construction of its power development plant. In connection with the plant, the city council let a contract for the construction of a tramway to connect the city with the point at which the power plant was to be erected, which necessitated the construction of a bridge across the river at the Pinawa channel. A temporary trestle which was erected brought about the starting of operations on the channel widening by the Street Ry. Co., and a clash between the two gangs of men ensued. The city council was to have appealed to the Dominion Government with a view to ascertain whether or no the company has the right to widen the channel, but an arrangement has been arrived at, whereby the work is to be proceeded with, and the necessity for such a step obviated. At Dec. 5, seven piers of the bridge had been completed, and it is hoped to have the remaining six erected about the end of this month. The bridge is built on wooden cribs and will be about 980 ft. long.

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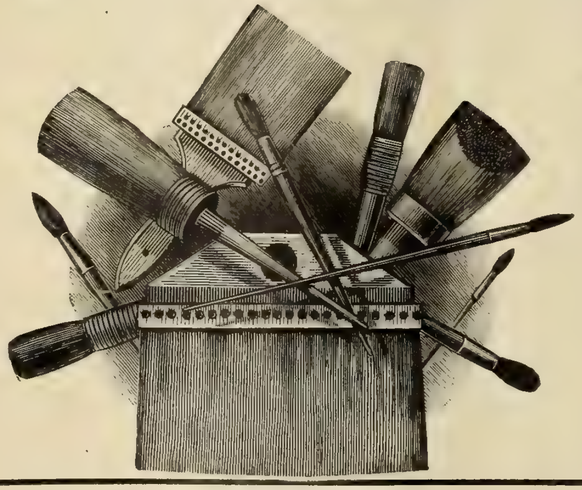

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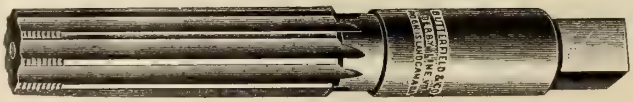

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The freight steamboat Alaskan, running between Seattle and Skaguay, ran aground near Cape Mudge, Vancouver Island, Dec. 9.

It is understood that the Union Steamship Co. will shortly place a contract for the construction of a vessel at a British Columbia port for its coast service.

The Union Steamship Co.'s new steamboat Caribou will, it is reported, be completed early in the year, G. T. Legg having gone to England to bring her out.

The details of the new dredger, for use in Victoria Harbor, which was built at Polson's Iron Works, Toronto, have arrived at New Westminster, where the vessel is to be put together.

The Puget Sound Bridge and Dredging Co., with head offices at Seattle, Wash., has been licensed under the Act respecting extra-provincial companies, to carry on its business in British Columbia, with R. M. Dyer, Vancouver, as its attorney.

The Columbia River Timber and Transportation Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $50,000, to carry on the business of lumbermen, and to acquire, build and operate steam and other vessels in the interests of the company.

The Chilliwack Manufacturing Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $15,000 and power to carry on the business of timber merchants, and in connection therewith to acquire and operate steam and other vessels, and to carry passengers and merchandise, collecting fares and freight charges therefor.

The Queen Charlotte Islands Development and Mining Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $100,000, and power to carry on the business of timber merchants, etc., and to acquire, maintain and operate wharves, piers, docks, steam and other vessels, and to receive goods, as wharfingers, warehousemen and general carriers.

A press report states that a company is being formed in Vancouver for the purpose of purchasing a vessel and placing it on the Fraser river, between New Westminster and Chilliwack, in the passenger and freight service. At present there are two vessels making alternate trips on this route, viz., the C.P.R. steamboat Beaver, and the Ramona, owned in New Westminster.

Columbia Agencies, Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $50,000, and power, amongst other things, to purchase, build or otherwise acquire steam and other vessels, vehicles and appliances necessary for the carrying on of the business of general carriers by land and water, and to promote or assist companies to carry out such purposes.

The National Construction Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $50,000, to carry on a general contracting business, and construction of buildings; to acquire docks, wharves, etc., necessary for the loading and equipment of vessels, and to build, charter or otherwise acquire steam and other vessels, and to carry passengers and merchandise.

The Canadian Fish and Cold Storage Co. is being organized to carry on a fishing and storage and produce business on the Pacific Coast, with headquarters at Prince Rupert, B.C. The company proposes to purchase ten large motor-propelled fishing vessels. The provisional directors are: A. Kelly, Winnipeg; Jas. Carruthers, Montreal; J. W. Stewart (Foley Bros. & Larson); G. H. Collins, Vancouver, B.C.; G. Starratt (New England Fish Co.).

◆

St. Lawrence Power Co.'s Proposals.

The St. Lawrence Power Co. was originally incorporated in the State of New York as the Longue Sault Development Co., having for its object the development of electric energy, by means of the flow of the St. Lawrence River at the Longue Sault rapids. The original proposal involved the construction of the power plant south of Barnhart Island, in the South Channel, and wholly in U.S. territory, but the later proposals are of a more elaborate character and include the construction of works in Canada to develop 50,000 h.p. These works will bring about the disappearance of the Longue Sault rapids, one of the most picturesque of the whole series of the St. Lawrence rapids. This being the case, the whole matter was brought within the purview of the Interstate Waterways Commission, which has before it all questions affecting the rights of Canada and the U.S. in the boundary waterways. The important question raised by the proposals of the company is whether or not the carrying out of the works will lower the level of the St. Lawrence, and in any way impede navigation. This question was recently fully pressed upon the consideration of the Canadian section of the Commission by representatives of the Shipping Federation of Canada, the Dominion Marine Association, and the Montreal Harbor Commission. The Richelieu and Ontario Navigation Co. is opposed to the project in its entirety, on the ground that the destruction of the Longue Sault rapids would be a loss to the company of what is now a valuable asset, and would lead to works being undertaken which would end in the destruction of the Lachine rapids. The Cornwall Electric Ry. Co., which at present obtains power from the river, is opposed to the proposal, but the project is supported by other Cornwall interests, on the ground that the C.E.R. Co. is not in a position to offer power for manufacturing purposes. It has been arranged that some engineers are to be selected for the purpose of giving an independent report upon the whole question.

The proposal of the company involves the construction of two dams, one across the main channel and the other across a secondary channel. The power-house, it was intended, should be built near the east end of Barnhart Island, and butt on the Canadian shore, forming a third dam. The water in the river above the power-house would rise above the crest of the dam, and it was proposed to raise the level of the water 5 ft. above the present level in the Cornwall canal. The St. Lawrence Power Co. would build a lock half a mile above lock 20, and a channel 800 ft. wide through the present Little River, between Sheek and Barnhart Islands, for the passage of vessels downwards. Going up the vessels must pass through the canals and channels to the north. On the southern side the U.S. Government, it is stated, will insist upon the construction of a lock off Longue Sault Island, and the company proposed to put in a lift lock there. These works, it was contended, would not interfere with the navigation of the river, except that vessels would have to go through the lift lock. There would be no pond nor lake for the storage of water, and under normal conditions the flow of water would be as at present. It was also contended that inasmuch as the rapid flow of water would be retarded by the carrying out of these works, the formation of fragile ice would be checked with beneficial results.

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The American Bureau of Shipping will note in its Record of American and Foreign Shipping, for this year, what ships are equipped to receive submarine signals.

LIST OF STEAM VESSELS REGISTERED IN CANADA FROM NOV. 15 TO DEC. 14, 1907.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Home Port.	Owners.
Caprice.......	107,425	Middleton, Conn., U.S., 1907	Screw 4 N.H.P.......	35.2	7.8	3.3	9	6	Brockville, Ont......	A. C. Hardy. Brockville, Ont.
Collingwood..	117,089	Collingwood, Ont., 1907....	" 163 "	386.0	50.0	23.0	4315	3285	Collingwood, Ont....	Farrar Trans'n Co, Ltd, Collingwood, Ont.
Hattie Bell...	122,560	Bridgenorth, Ont., 1907....	" 1 "	40.1	8.0	3.0	8	5	Peterborough, Ont...	Mrs. N. G. Bell, Bridgenorth, Ont.
Mabel D......	117,088	Collingwood, Ont., 1907....	" 10 "	64.0	15.0	6.6	38	26	Collingwood, Ont....	F. W. Doty, Goderich, Ont., and R. J. Morrill, Collingwood, Ont.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA FROM NOV. 15 TO DEC. 14, 1907.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Home Port.	Owners.
Algonquin.....	125,987	Montreal, 1907...........	Dred.	90.8	36.6	6.9	372	335	Montreal, Que.....	H. M. Connolly, Montreal.
Bessie Willow...	122,089	Point Prim, P.E.I., 1907...	Schr.	39.6	12.2	5.4	17	17	Charlottet'n, P E.I.	S. McLeod, Point Prim, P.E.I.
H. R. Silver ...	122,313	Lunenburg, N.S., 1907.....	"	114.0	29.0	10.7	240	199	Lunenburg, N.S...	W. C. Smith, Lunenburg, N.S.
Isidore.........	125,993	St. Alexis, Que., 1907......	Barge	106.0	22.5	7.8	162	162	Quebec, Que......	J. C. Kaine, Quebec, Que.
Mildred........	122,314	Lunenburg, N.S., 1907.....	Schr.	107.0	27.0	10.8	199	166	Lunenburg, N.S...	W. C. Job, St. John's, Nfld.
Silver Star	116,555	Lower Selmah, N.S., 1907..	Barge	88.9	26.2	7.9	121	99	Maitland, N.S.....	A. M. Anthony, Lower Selmah, N.S.
Stanley........	125,992	St. Alexis, Que., 1907......	"	106.0	22.5	7.8	162	162	Quebec, Que......	J. C. Kaine, Quebec, Que.
Sultana........	122,561	Gore's Landing, Ont., 1907	"	63.5	16.0	3.9	29	29	Peterborough, Ont.	W. Harris and D. McAllister, Gore's Landing, Ont.
Vivian.........	126,021	Ingonish, N.S., 1907.......	Schr.	55.0	14.0	7.2	25	25	Sydney, N.S.......	M. S. Hackett, North Sydney, N.S.

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MARINE NOTES FROM THE DUAL PORTS.

Our Port Arthur correspondent wrote, Dec. 12: The season of navigation just closed has been, on the whole, satisfactory to vessel owners on the Canadian side of the Lakes. While the quantity of grain fell some five millions of bushels short of the season of 1906, this shortage was more than compensated for in the increased volume of westbound package freight and coal.

Up to the end of Aug., each month showed a steady increase over the same month of 1906 in package freight, but the late harvest, and financial stringency, caused a notable falling off for Sept., Oct. and Nov.

The C.P.R. received 800,000 tons of coal over its docks at Fort William; the Canadian Northern Ry. received 700,000 tons over the Pittsburg dock at Port Arthur.

Freight rates on grain were well maintained up to the time the money stringency set in, from that on to the close, they were scarcely up to the average of the spring and summer.

Casualties of a more or less minor character were very numerous, caused mainly by strandings of the larger class of steel vessels in the inter-lake channels. Lake Superior contributed two very serious ones, in the loss of the steamer Cyprus with 22 lives, and the steamer William Nimick with 8 lives.

Following is a statement showing the kinds, quantities and destination of all grain shipped out of the dual ports for the season of 1907:

	WHEAT		OATS	BARLEY		FLAX
Destination	Canadian Vessels	Foreign Vessels	Canadian Vessels	Canadian Vessels	Foreign Vessels	Canadian Vessels
Owen Sound	1,141,998.20		952,204.02	178,745.44		
Midland	2,208,028.50		34,493.24	24,139.02		
Tiffin	376,657.10		154,562.02	77,240.22		
Depot Harbor	2,353,062.10		70,337.32	17,495.20		
Collingwood	159,772.10		13,415.20			
Point Edward	1,168,299.50		55,705.18	31,100.28		15,000.00
Meaford	687,879.10		176,884.30	41,637.28		
Goderich	1,833,674.10		126,153.32			128,699.27
Welland Canal	430,594.20					31,701.44
Kingston, Prescott and Montreal	4,929,673.30		450,528.22	116,419.20		142,092.26
Port Huron	106,093.50	101,395.50	6,334.02			
Buffalo	1,029,164.50	3,414,437.30		51,471.20	40,273.44	
Erie	300,181.00	219,392.20				
Chicago		85,554.20				
Canadian vessels	16,725,077.20	3,820,779.20	2,040,616.84	538,247.84	40,273.44	317,492.97
Foreign vessels	3,820,779.20			40,273.44		
1907	20,545,856.40		2,040,616.84	578,521.28		317,492.97
1906	25,160,266.10		2,238,769.16	379,548.08		208,226.34
Decrease	4,614,409.70	Decrease	198,152.32	In. 198,973.20	Increase	109,266.6

Winter Navigation of Great Lakes.

A. A. Wright, President of the Dominion Marine Association, wrote on Nov. 28:

"Dr. Smellie, M.L.A., is reported as stating that navigation should be kept open on the Great Lakes for ten months, etc. Now, breaking ice is not the only thing, and if Dr. Smellie will make a few trips between Nov. 1 and Dec 5, when insurance closes navigation, standing watch on the bridge of a freight steamer with the officers, he will realize that sailing a steamer on Lake Superior in winter and sailing her in a comfortable, steam-heated hotel or office are two different propositions. He should know that it is almost inhuman to send men out on vessels when the temperature is away below zero, snowstorms frequent, vessels becoming covered with ice on weather side to such an extent that they list until the compass is affected, taffrail log rendered useless by ice, till no captain can be sure of his location when approaching Passage Island going up, or Whitefish Point coming down, decks covered with ice so that a man cannot keep his feet while the vessel is thrown around by the force of the sea.

"I will guarantee that if the men who are asking for ice-breaking and winter navigation had to sail the boats we would hear no more of such nonsense. Experience has amply proved that the average of reasonably safe navigation on Lake Superior is only from May 1 to Dec. 1 or 5. Insurance rates were advanced last spring nearly 20% as a result of ice-breaking in 1906, which shows what the result was.

"Another thing is in case of stranding on the uninhabited shores of Lake Superior. The Golspie case shows what is the least that could happen, as that was early in the season. After Dec. 1 every man of a crew would perish.

"It has been stated also that vessels were coming into Fort William slowly, that the elevators, working nights, days and Sundays, had shipped 1,000,000 bush. last week, the greatest of any week this season, and that elevators were full, etc. A few facts on this point might be of interest: Elevator B has loaded 200,000 bush. on a steamship in two hours. The Empire and C.N.R. can do as well, so that the elevators could load 1,000,000 bush. in a day if they tried. Elevators there have a storage capacity of close to 20,000,000 bush. and official stocks on Nov. 23 were only 6,648,000 bush. Canadian vessels alone have a carrying capacity to Georgian Bay of over 5,000,000 bush. per week if the railways and elevators could handle that quantity.

"Canadian vessels have been carrying United States grain, coal and ore, virtually killing time since Sept. 1, because they could not get cargoes of wheat from Fort William, and it takes an average of two days or more to load a steamship at Fort William and Port Arthur, while the same boat would be loaded at Duluth or Chicago in 12 hours.

"If Dr. Smellie and others who talk of winter navigation would use their efforts to improve the despatch in loading and get shippers to ship their grain earlier there would be no need of exposing men and vessels in Dec. to the dangers of Lake Superior, or asking the Dominion Government to spend public money breaking ice."—Toronto Globe.

Stranding of the S.S. Montreal.

Commander O. G. V. Spain, R.N., Dominion Wreck Commissioner, has given the following judgment in the case of the stranding of the C.P.R. Co.'s S.S. Montreal, near lighthouse no. 2, Lake St. Peter, Que., on Oct. 29 about 5.30 p.m., the judgment being concurred in by Capt. A. Reid, Port Warden of Montreal, and W. Gauthier, branch pilot for and above Quebec harbor, who sat with him as assessors:

"That the S.S. Montreal was fully found in all the necessary requisites to safe navigation, and properly manned in every particular in accordance with the Act; that the machinery and steering gear worked well: and that the pilot's orders were promptly attended to. It appears from the evidence adduced that all went well on the voyage until after the vessel passed Quebec, where branch pilot L. Bouille, who holds a pilotage certificate for and above Quebec harbor, was taken on board and took charge of the navigation of the vessel. There was no trouble whatever experienced up to the time of passing the buoy on the south side of the channel, below lightship 2; the pilot himself steering, and a strong wind blowing from the north. At this place the Montreal took a sudden sheer to starboard (probably from the fact of having too much port helm at the time, although after passing the buoy the helm was put hard a starboard), and took the ground near lightship 2, striking her port bow against the crib and concrete base of the collapsed light-tower, thereby causing serious damage to the port side of the vessel, filling no. 1 hold and no. 2 deep tank, with water, and damaging a large portion of cargo. The vessel remained stranded until 8 a.m., Nov. 3, when, after lightening a good portion of the cargo, she floated and proceeded on her voyage to Montreal. The testimony as to the working of the engines and the orders given shortly before the accident occurred is conflicting, but the Court considers that the evidence brought forth proves that the instructions of the pilot, in regard to the movements of the engines, were obeyed, and that he was responsible for any orders given. The Court considers that the stranding was caused by the wrongful act of the pilot and adjudges him guilty of a grave error of judgment in (1st), attempting to cross Lake St. Peter and not anchoring at the new anchorage ground, opposite white buoy 57, when he found the vessel was not (as he claims) steering well, and darkness was rapidly approaching; and (2nd), although the channel is 600 ft. wide at this point, by attempting to pass north of lightship 2, which was evidently his intention, as, after the vessel had taken the ground, he gave the order 'full speed ahead' on both engines, and 'hard-a-port'. The Court takes into consideration the long experience, 18½ years, which Bouille has had as a pilot, his uniform good conduct and freedom from accidents during this period; and, in view of these facts, desires to be as lenient as possible, under the circumstances, but cannot overlook the grave error in judgment that he made on this occasion; and, therefore, impose a fine of $75, to be paid in three quarterly instalments of $25 each; the first instalment to be paid on Jan. 1, 1908. The Court exonerates the master and officers of the S.S. Montreal from all blame."

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The recent death of F. Carbray has caused a vacancy on the Quebec Harbor Commission, which it is anticipated will be filled by the election of Hon. J. C. Kaine.

The Government steamship Lady Laurier was recently engaged in repairing and replacing buoys and lights on the coast of Nova Scotia, where several of the buoys had got adrift, causing grave danger to navigation.

The Dominion Steamship Line are having built at Belfast, Ireland, the first of the two new vessels which it was recently arranged to add to the fleet. She will be provided with three propellers, the centre one being driven by a turbine and the others by reciprocating engines.

The work of re-uniting the two sections of the C.P.R. steamboat Keewatin has been completed, and the vessel berthed at Owen Sound for the winter. In addition to the uniting of the sections, some small repairs were also undertaken, she having touched bottom when coming up the St. Lawrence river.

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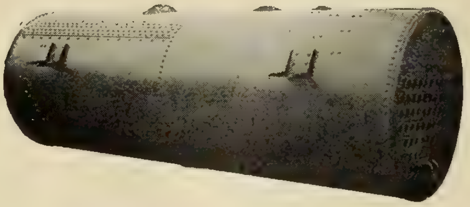

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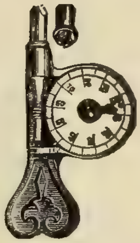

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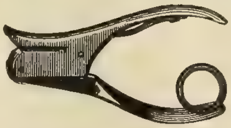

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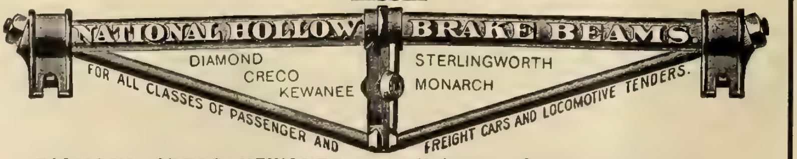
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Notices to Mariners.

No. 115. Nov. 5.—Ontario Lighthouse Division—299. Quebec, Lake St. Louis, Ottawa River mouth, Ile Perrot, change in lighting arrangement. Ontario—300. Lake Ontario, Kingston harbor, magnetic variation. 301. Lake Ontario, gas buoy marking wreck of Sir Wilfrid removed.

No. 116. Nov. 6.—Nova Scotia—302. Cape Breton Island, south coast, Louisburg harbor, intended change in fog alarm at outer light station. 303. Prince Edward Island, east coast, off Panmure ledge, buoy established.

No. 117. Nov. 6.—British Columbia—304. List of wireless telegraph stations established by the Government of Canada. 305. Vancouver Island, west coast, Hesquiat harbor, shoal patch off entrance.

No. 118. Nov. 7.—Quebec—306. River St. Lawrence, ship channel between Quebec and Montreal, Lake St. Peter, Yamachiche bend, anchorage, alterations in buoyage. 307. River St. Lawrence, chart, Three Rivers to Becancour, issued.

No. 119. Nov. 11.—Quebec—308. River St. Lawrence below Quebec, Portneuf-en-bas lighthouse damaged by storm, temporary light. 309. Saguenay river, Cape East, light established.

No. 120. Nov. 13.—Quebec—310. Gulf of St. Lawrence, Esquimaux point, Walrus channel, range lights established. 311. Gulf of St. Lawrence, Magpie bay, Ramblers cove, range lights established. 312. River St. Lawrence, ship channel between Quebec and Montreal, Ile aux Raisins, range lights moved, new front range lighthouse.

No. 121. Nov. 15.—Ontario—313. River St. Mary, Sault Ste. Marie canal, upper entrance, float light replaced by gas buoy. 314. River St. Mary, Vidal shoal, float light replaced by gas buoy. United States of America—315. Lake Champlain, Burlington harbor, Burlington breakwater south light station, fog bell established. 316. Lake Ontario, eastern end, Stony Point light, change in characteristic. 317. Lake Erie, Buffalo, Niagara River range lights, change in color.

No. 122. Nov. 18.—Quebec—318. River St. Lawrence, Orleans Island, St. Jean, light improved. 319. River St. Lawrence, Orleans island, St. Laurent, light improved. 320. River St. Lawrence, Quebec, new front range lighthouse.

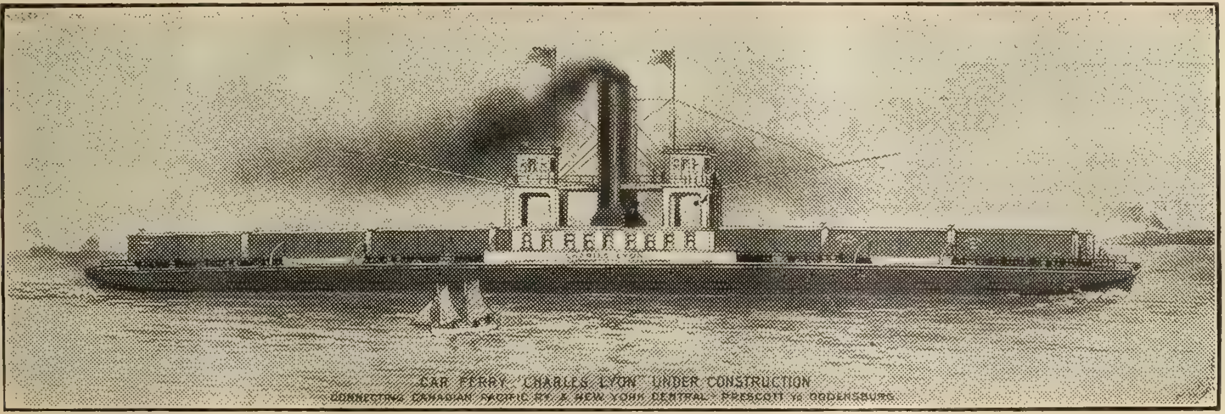
No. 123. Nov. 20.—New Brunswick—321. East coast, Strait of Northumberland, Cape Tormentine, new back range light tower. 322. East coast, North Tracadie, back range lighthouse raised, light improved. Newfoundland.—323. East coast, Twillingate (Toulinguet) harbor, wharf and light destroyed. Ireland.—324. East coast, Rosslare approaches, shoals in approach. England.—325. West coast, Bristol channel, Avonmouth, leading lights altered.

No. 124. Nov. 22.—British Columbia—326. Queen Charlotte islands, north coast, Parry passage and approaches, dangers, hydrographic information, sailing directions. 327. Hecate Strait, Edye passage, western approach, uncharted shoals.

No. 126. Dec. 2.—British Columbia. 330. Strait of Georgia, Active pass, Gossip shoals, bell buoy established. 331. Johnstone strait, Siwash rock, buoy established. 332. Johnstone strait, Ripple shoal, buoy established. 333. Broughton Strait, Haddington reefs, gas buoy established. 334. Fitz Hugh sound, north entrance to Rivers inlet, uncharted rock southward of Swan rock, buoy established. 335. Fisher channel, Walbran rock, change in character of buoy. 336. Telegraph passage, Bloxam shoal, buoy established. 337. Chatham sound, Metlakatla bay, Alford reefs, gas buoy established.

The following notices have been issued by the U.S. Hydrographic office:

No. 49. Dec. 7.—2233. Detroit River, lightvessel, float lights and light buoys to be withdrawn for the winter. 2237. Lake Ontario.—New York.—Gas buoys to be withdrawn for the winter. 2240. Nova Scotia, southeast coast, St. Mary River, hydrographic information. 2241. Nova Scotia.—Southeast coast, Sable island, west end light, reported irregularity. 2253. British Columbia, Queen Charlotte islands, Frederick island, anchorage.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The Car Ferry Charles Lyon.

The Canadian Pacific Car and Passenger Transfer Co.'s icebreaking car ferry Charles Lyon was launched from the Polson Iron Works, Toronto, Dec. 7. The christening ceremony was performed by Mrs. J. B. Miller, wife of the President of Polson Iron Works, Ltd. The hull is constructed of steel throughout, conforming to the highest class of the American Bureau of Shipping, and is extra heavily built, with ice belt to withstand the strain due to ice crushing. She is double-ended, in order to facilitate rapid loading and unloading, and is arranged to carry fourteen loaded cars on double tracks, in addition to having suitable accommodation for passengers. Her engines and boilers, which have been designed and will be constructed by the Polson Co., will have attached air pumps, ballast pumps, etc. There will be two sets of vertical inclined compound jet-condensing engines, each having cylinders 22 and 44 ins. diameter by 30 ins. stroke, and each set capable of developing 1,000 i.h.p., or 2,000 h.p. in all. Engines to be equipped with attached jet condensers and air pumps, and steam supplied from four boilers of the Scotch water back type, each 11 ft. 4 ins. long, by 11 ft. diameter, tested to a working pressure of 130 lbs. per sq. in., and operated by a forced draught. There are also two steam steering engines and gears, four patent steam capstans, searchlights, steam heating, sanitary system, and an electric lighting system.

The general dimensions are: length, over all, 280 ft.; breadth, moulded, 40 ft.; depth, moulded, centre, 22 ft.; depth, moulded, ends, 18½ ft.; draught, full load, 12 ft. It is intended to run the ferry all the year round between Prescott, Ont., and Ogdensburg, N.Y., connecting the C.P.R. with the New York Central. The boat was named after the father of the Car Ferry Co.'s President, Capt. D. H. Lyon, of Ogdensburg.

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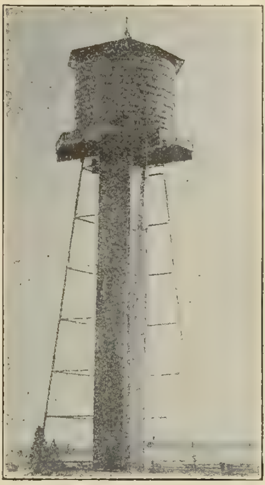
Blue Book of American Shipping.—The Penton Publishing Co., Cleveland, Ohio, has issued the 12th annual edition of the Blue Book of American Shipping, containing 540 pages—the largest and most complete volume yet issued. The list of vessels is divided into sections, viz.: Steam and sail vessels of the coasts and rivers; U.S. steam and sail vessels of the Great Lakes; Canadian steam and sail vessels of the Great Lakes; to which are added lists of the vessels grouped under the names of the owners, managers or operating companies. This list is corrected to April 1, 1907, and consequently shows the state of the U.S. and Canadian mercantile marines at the opening of the past season of navigation. The volume also contains lists of shipbuilders and repairers, dry docks, associations for the advancement of marine interests, employers' and employes' organizations, Government officers and officials having to do with marine interests, and general statistics relating to the trade of 1906. In addition there are lists of the principal shipowners of the world, of the naval architects and engineers of the U.S. and of Europe, together with a large amount of miscellaneous information and useful tables.

It was decided in a case at St. Thomas, Ont., Dec. 30, that a fisherman is not a seaman within the meaning of the Canada Shipping Act, and therefore cannot claim exemption from garnishment, provided in the Act for seamen.

A ship canal connecting lakes Michigan and Superior, it is reported, will be undertaken in 1909, and completed in about four years. The route proposed is by way of the Whitefish River, Mud Lake, Au Train Lake, and Au Train River.

The hearing of the petition for the winding up of the Upper Ontario Steamboat Co., Ltd., was adjourned to Jan. 7, so that a detailed statement of the company's affairs can be put in. The company claims that it is quite solvent, and that the assets show a considerable surplus over liabilities.

Carrière Bros. Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $150,000 and offices at St. Louis, Que., to carry on the businesses of dealers in timber and of general contractors, and in connection therewith to acquire and operate steam and other vessels to carry on a shipping and transportation business.



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Marine Interests in Parliament.

The Canadian Shipping Act, Consolidated Statutes of Canada, 1907, Cap. 113, is being brought up for consideration at the current session of the Dominion Parliament, three bills for its amendment having been introduced into the House of Commons.

Mr. Lancaster's Bill, which proposes to amend sec. 75 by striking out the words in the second and third lines, "or for persons domiciled in Canada for at least three years," and by repealing sub-section two of the same section, is the same bill introduced in 1907 for the purpose of limiting the granting of certificates for navigating Canadian vessels to Canadian citizens.

Mr. Maclean, Lunenburg, N.S., has introduced a bill having for its object the substitution of a new definition of a coasting voyage for that at present contained in par. 6, sec. 72, of the Act. The paragraph proposed to be inserted defines coasting voyage as "a voyage between Canada and Newfoundland, or St. Pierre or Miquelon, or a port or place on the eastern coast of the United States, or Mexico, or Central America, or in the West Indies, or on the eastern coast of South America, not further south than Rio de Janeiro; and also means a voyage between any port or place on the western coast of Canada, and any other port or place on such coast, or on the western coast of the United States, not further south than the harbor of Portland, Ore., and not further north than Cape Spencer, Alaska, or any inlet or bay having its entrance on the eastern side of the said cape." It also proposes to amend sections 96, 97 and 98, by substituting 300, 300 and 500 for 100, 200 and 500, respectively; and sec. 477 by adding a new paragraph (g) "Ships making or entering a harbor for refuge."

The bill to amend the clauses of the Act respecting the exemption from inspection and the employment of engineers, which has been brought forward annually for several years past by L. McCarthy, has again been given its first reading. It proposes to amend sec. 566 by striking out paragraphs b, c and d, and by substituting therefor one new paragraph (b) as follows: "No steamboat having an engine under 10 n.h.p., if it is of the single cylinder type, and 18 n.h.p. if it is of the compound type, shall be subject to any of the provisions of this part," and sec. 641, sub-sec. 1, by striking out the words, "or any freight steamboat of over 150 tons gross," in the third and fourth lines, and by substituting therefor: "Or any steamboat having an engine of more than 10 n.h.p. if of the single cylinder type, or 18 n.h.p. if it is of the compound type, other than a steam yacht used exclusively for pleasure or private use, without hire or remuneration whatever."

Motor Lifeboat for Vancouver Island.

The new motor lifeboat built to the order of the Dominion Department of Marine, in the U.S., has arrived at Victoria. The tests which took place recently were overlooked by Col. Anderson, Chief Engineer of the Department. The boat is 36 ft. over all, 8 ft. 1½ in. beam, built almost completely of mahogany, and fastened with gunmetal and copper, no iron being permitted. It is diagonally planked in two layers, with canvas between, and is self-baling and self-righting, with the crew lashed to the thwarts. It is divided into eight watertight compartments below the deck, and each compartment is filled with copper air-cases, 82 in all. It is lug rigged with foresail, mainsail and jib, with hollow masts, gunmetal centreboard, and is also fitted for ten oars. A 35-40 h.p. six-cylinder four-cycle gasolene motor is installed in the after end compartment, which gives a speed of 9¾ miles an hour with 650 revolutions. The controls are so arranged on the outside of the compartment bulkhead in recessed boxes that the motor can be readily managed from the outside when the compartment is closed watertight. A fuel tank of 125 galls. capacity is located in the lower hold just forward of the centreboard trunk, and an auxiliary fuel tank of 25 galls. capacity is placed under the turtleback of the forward end compartment, into which the fuel is pumped from the main tank as required. This supply is enough for about 40 hours' running. The fuel pipe to the motor leads from the auxiliary tank outside along the garboard. A glass in the forward bulkhead enables the height of the fuel to be seen in the sight tube attached to the auxiliary tank. It is fitted with jump spark ignition, the current being supplied by ignition apparatus, which also furnishes current for a stationary and drop light in the motor room, and a light by the sight tube of the auxiliary tank forward. The whistle is operated by air, compressed by the motor. The boat is steered by a wheel, which can be instantly detached from the rudder head, in case the steering oars are to be used in a bad surf, and the rudder is to be triced up. The cost of the boat was about $15,500. Capt. W. Gillen, a Nova Scotian, has been appointed coxswain.

The Steamships Kenora and Regina.

THE CANADIAN LAKES TRANSPORTATION CO., LTD., S.S. KENORA.

The Canadian Lake Transportation Co.'s new steamship Kenora has arrived on the lakes, and on the re-opening of navigation she will be placed on the Montreal-Fort William route. She was launched Sept. 3, and crossed the ocean in ballast, arriving at Montreal at the end of Nov., where she loaded sugar for Hamilton, on delivery of which she will return to Toronto, where she will be berthed for the winter. The Kenora, of which the Regina is a sister ship, was built by A. McMillan & Son, Ltd., Dumbarton, Scotland, and is a single-screw steamer, built in accordance with the regulations of the British Corporation for the survey and registration of shipping. Her general dimensions are: length over all, at upper deck, 256 ft.; between perpendiculars, 249¼ ft.; over stem and stern post, 243 ft.; beam, moulded, 42½ ft.; depth, moulded to upper deck, 23 ft.; height at side between decks, 8½ ft.; canal draught with full cargo, 14 ft.; dead weight on canal draught, gross, 1,950 tons. She is double-decked, with sunk forecastle, water bottom, with deckhouse aft. Texas and chart house on top of forecastle, and wheelhouse over texas. She is rigged with two short pole masts. There are six cargo hatches, four being 8 ft. long, and two 16 ft. long; boiler hatch, 26 by 22 ft.; engine hatch, 16 by 10 ft. The berth and stateroom accommodation includes owner's stateroom, cabin and bathroom, captain's quarters, officers', engineers' and crews' quarters, with separate dining and bathrooms. The engines are of the direct-acting, triple-expansion, vertical, surface condensing type, with cylinders, 17, 28, and 46 ins. diameter, by 33-inch stroke. The main feed pump has single cylinder, 7½ ins. diameter at steam end, 5½ ins. diameter at water end, by 15 ins. stroke; centrifugal circulating pump, 7 ins. type by 26 ins. impellor, maintaining a vacuum of 26 ins., with engines at full speed. Steam is supplied by two Scotch boilers, each 11 ft. long, by 12 ft. diameter, at a pressure of 185 lbs. per sq. in. Auxiliary duplex feed pump, 9 by 6 by 10 ins.; ballast pump, 9½ by 11½ by 18 ins.; sanitary pump, 6½ by 5 by 10 ins.; and ash ejector worked by air feed pump are provided. Current for lighting is supplied from a direct current, constant potential, compound wound, multipolar, direct connected, and self-regulating dynamo, driven by an engine of a vertical double cylinder high speed encased type. There is a steering engine with cylinders 7 and 6 ins. diameter, a steam capstan fitted aft, and two 3-ton double cylinder steam winches.

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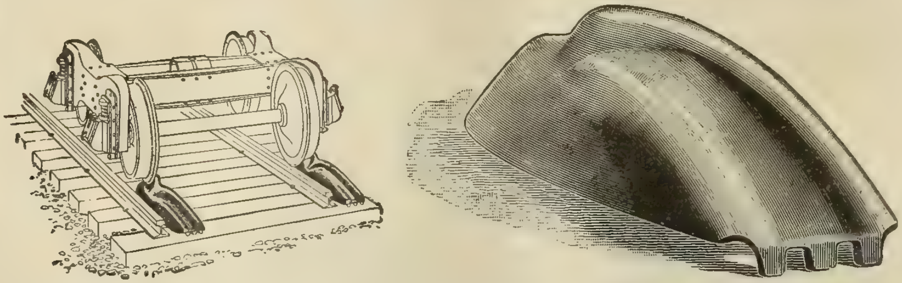

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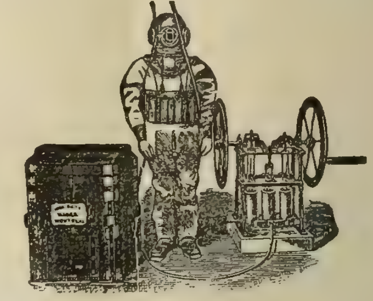

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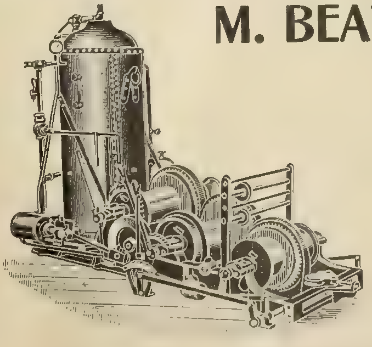

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THE EDMONTON, YUKON AND PACIFIC RAILWAY COMPANY.

NOTICE is hereby given that The Edmonton, Yukon and Pacific Railway Company will apply to the Parliament of Canada, at its next session, for an Act extending the limit of the issue of bonds, debentures or other securities to the sum of $25,000 per mile in respect of the company's line constructed or to be constructed east of the Foothills of the Rocky Mountains, and to $35,000 per mile on other portions of the company's line.

GEO. F. MACDONNELL,
1 Toronto St., Toronto,
Assistant Solicitor.

Toronto, Ontario, 23rd November, 1907.

THE VICTORIA ROLLING STOCK CO. OF ONTARIO, LIMITED.

NOTICE is hereby given that a dividend of six per cent. on the paid-up capital stock of the Company for the half-year ended Nov. 30th, 1907, has been declared payable Dec. 1st, 1907, to the shareholders on record as of the 30th of Nov., 1907.

By order of the Board,

R. A. SMITH, Secretary.

Toronto, Nov. 19th, 1907.

Telegraph and Cable Matters.

Hon. L. P. Brodeur announced, Dec. 16, that the Government had entered into an arrangement for the erection and equipment of five wireless telegraph stations on the Pacific coast.

The Dominion Deforest Wireless Telegraph Co.'s stock, stores, etc., used in connection with its business, together with office furniture and fittings in Montreal, were sold by auction, Dec. 16, by order of the liquidators.

An injunction was granted recently restraining the Ontario Power Co., and the Falls Power Co., from erecting poles and transmission wires on Hallam St., Welland, Ont., in close proximity to C.P.R. telegraph and Bell Telephone Co.'s lines.

The Dominion Minister of Public Works has stated in the House of Commons, that the receipts of the Yukon telegraph system from Mar. 31 to Dec. 11, were $52,725, the expenses $136,188, and there had been no expenditure on capital account.

B. Brooks, General Superintendent, accompanied the Assistant Superintendent and Electrician of the Eastern Division, Western Union Telegraph Co., on a tour of inspection of the company's lines and offices in the Maritime Provinces, during Dec.

A. A. Allan and R. Bickerdike have been elected President and Director, respectively, of the Marconi Wireless Telegraph Co. of Canada. The elections were rendered necessary on account of the recent death of Lt.-Col. Henshaw, the first President of the company.

The Western Union Telegraph Co. has declared the usual quarterly dividend at the rate of 5% per annum. The dividends will be paid by the issue of new stock instead of cash. Since 1880, the company has always paid dividends in cash, with the exception of 1902, when a portion was paid in scrip.

Sir J. Ward, Premier of New Zealand, announced recently that he is urging the Pacific Cable Board to reduce its rates between Australasia and Great Britain from 1s. to 4d. a word. He also suggested that, in conjunction with Australia, an independent cable connection with Great Britain may be considered.

D. Pottinger, General Manager Intercolonial Ry., gave an interview to a committee of the telegraph operators on the Government Railways, Dec. 13, respecting an application for increases of pay of about 20%. It was understood that the result was considered satisfactory to the operators, and that a conference had been arranged with the Minister of Railways on the subject.

The testing of the new Dominion Government wireless telegraph stations on the British Columbia coast was successfully accomplished Dec. 2, and messages were exchanged at the rate of 30 words a minute. Reports state that it is the intention to establish a line of stations between Victoria and Prince Rupert at Cape Lazo, Estevan Point and Pachena, during this year.

F. J. Cross, an electrical expert, arrived in Vancouver, B.C., recently, on his return from the Fiji Islands, where he had been on behalf of the British Government, to examine and report on the feasibility of establishing a series of wireless telegraph stations for a service between British Columbia and Australia and New Zealand. It is stated that such a scheme is practicable, at an approximate cost of $500,000.

The Dominion Government British Columbia coast telegraph line connecting Victoria with Clayoquot, via Carmanah, San Juan, Cape Beale, Banfield, Alberni and Ucluelet, has been taken over by the Public Works Department, and the service will be, in future, a night and day one, instead of a day service only, as heretofore. Until taken over by the Public Works Department, the line has been operated by the C.P.R.

The C.P.R. Telegraph Department has opened offices at Hardisty, Killam, Pincher Creek and Sedgwick, Alta.; Nicola, B.C.; Bradwardine and Ebor, Man.; Camperdown, N.S.: Auburn, Bala, Beaucage, Blyth, Coldwater, Credit Forks, Cunickel, Eady, Glencoe, Hobart, James Bay Jct., McGaw, Midhurst, Walton, Weissenberg, and West Moncton, Ont.; and Aylesbury, Bladworth, Colley, Creelman, Fairlight, Goven, Nokomis, Osage, and Wauchope, Sask.

The Minister of Marine, replying to a question in the House of Commons, Dec. 4, said the Department was informed by the Marconi Wireless Telegraph Co., that it was doing a regular commercial trans-Atlantic press business for certain newspapers. Ordinary public messages would be taken when all arrangements were completed. The service had been in operation since Oct. 17, the rates being: Government messages, 10c.; press messages, 5c. a word. These rates are in accordance with the Government contract with the company.

The Board of Conciliation appointed to investigate the disputes between the G.T.R. and its telegraph operators consists of Prof. Adam Shortt, Chairman, Wallace Nesbitt, K.C., representing the company, and J. G. O'Donoghue on behalf of the men. In the meantime, it is stated that the operators have been offered and have declined an increase of 10%, they considering that they are entitled to 14%. In connection with the tendency towards increased pay, a press report states that all operators are being sounded by the central union organization, as to their feelings on the question of a general demand for an increase of 30% and an eight-hour day, to commence on March 1

The Dominion Government telegraph line in Yukon Territory is reported to be in very bad condition, and complaints from business men at Port Simpson, Prince Rupert and Port Essington have been very frequent lately. The main line of the Yukon system extends from Ashcroft, a C.P.R. station about 200 miles east of Vancouver, to Dawson. Port Simpson, Prince Rupert and Port Essington are served by a branch of about 250 miles, which leaves the main line at Hazleton, and it is of this branch that complaint is made. It is stated that the line between Hazleton and Prince Rupert was down from Oct. 31 to Nov. 21, except for one or two short periods of a few hours each, and that the men engaged on repair work are too few and inefficient.

Control of Telephones and Telegraphs.

In the speech from the throne at the opening of the current session of the Dominion Parliament the Governor-General said: 'The time has arrived when the public interest requires that telegraph and telephone companies holding Federal charters shall be placed under Government control. A bill will be introduced for that purpose.'

In the debate following in the House of Commons, R. L. Borden asked the Government for some explanation of the paragraph, saying that there was nothing to indicate whether or not it meant bringing them under the control of the Railway Commission, as some of the speakers seemed to indicate.

The Premier in reply said it was better to know on this question where they were and what the platform of the Conservative Party was with respect to that question. There was a tendency in Canada at present, derived from the other side of the line, to denounce all corporations and represent them as inimical to the public weal. The truth was that

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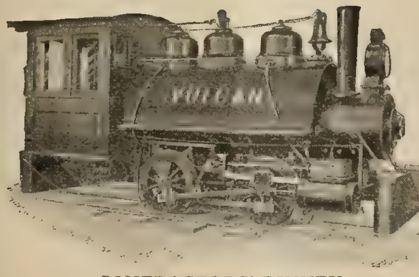

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the corporations, like all human institutions, were a mixture of good and evil. It was undeniable that corporations had sometimes acted mischievously, but it was also true that corporations had been one of the most potent agents of the creation and distribution of wealth amongst all classes of the community. It was undeniable that corporate capital, corporate labor and corporate effort would do more than individual capital, labor or effort. The member for South York said, "Down with all corporations, down with the railway corporations, and let the State perform the duties they are called upon to serve." The leader of the Opposition argued one way, and concluded the other, but the man who looked upon the question calmly and dispassionately must come to the conclusion that the interests which were served to-day by private enterprise were better discharged than they could be by the State. The question was as to a remedy, and he apprehended that the remedy was not to

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entrust the railways to the State. The true policy was to have the corporations subjected to the control of Parliament, which would see they discharged their duties properly.

Mr. W. F. Maclean—What about Germany?

Sir Wilfrid—Thank God, we are not here to take example from Germany or Russia.

Mr. Maclean—What about New Zealand and Australia?

Sir Wilfrid answered that they were young commercial communities that had gone much further than he would agree to go. If the incentive of ambition and emulation were removed the result would be suppression of progress and the introduction of stagnation and immobility. He cited the C.P.R., first commenced as a Government enterprise, but finished and now operated by a private company, in support of his contention. So far as his recollection went, not a single word had been uttered against the change from public ownership. He alluded to many enterprises of the C.P.R., such as hotels, smelters, lake and ocean fleets, the operation of coal mines, and asked if his hon. friend pretended that this would exist to-day if the railway was a Government enterprise. It was true there were complaints in various parts of the country against the railway service, but the remedy was control by the Government and Parliament. Passing to the Opposition's platform relative to the nationalization of telegraphs and telephones, he took issue with the statements made in Mr. Borden's speeches as to the success of Government telegraph and telephones in Britain. The report of the British Postmaster-General showed that in the last fiscal year there was a net deficit on the telegraph branch of £652,000, and if interest on capital were added to the total, a loss of £923,000, while the telephone department did business at 20% less than cost "Now, sir, upon this point, as upon the other," Sir Wilfrid went on, "we think on this side of the house that the remedy is not Government ownership, as has been advocated by my hon. friend, but private ownership and Government control. He has asked me what we mean in regard to this. We mean that we shall introduce legislation to increase the power of the Railway Commission, increase its membership as well, and give it control of telegraphs and telephones, as it has of railways."

General Telephone Matters.

The Hastings Telephone Co.'s line is being extended to Roslin, Ont.

The Melita-Arthur Telephone Co. has installed 15 instruments on its extension to Broomhill, Man.

J. R. Dargavel, Brockville, Ont., is promoting an independent rural telephone service in that neighborhood.

East Toronto, Ont., will, it is said, have an independent telephone system, to be in operation towards the end of 1908.

The Nova Scotia Telephone Co. has taken over the Central Telephone Co.'s line between Bridgewater and Middleton, N.S.

At a special meeting of the Niagara District Telephone Co., Ltd., recently, a proposition to increase its capital stock was discussed.

P. A. McPherson, local manager Bell Telephone Co., Omemee, Ont., was injured by an explosion of gas at a fire doing about $16,000 damage there, Dec. 13.

The Lumsden and Lost Mountain Valley Telephone Co., Ltd., has been incorporated at Regina, Sask., under the Northwest Territories Companies Ordinance.

The Independent Telephone Co. has completed its initial installation at Caledonia, Ont., and has placed 60 instruments in connection with the local exchange.

An extension of the telephone system between Sydney and Florence, N.S., has been undertaken; poles have been erected, and it is hoped to have the installation completed very shortly.

The Saskatchewan Government has created a department of telephones in connection with the provincial railway commission. Construction work will, it is said, commence in the spring.

The Nelson, B.C., Board of Trade, has passed a resolution favoring the provision of a telephone system connecting some of the rural districts, and steps are being taken with that object in view.

Construction on the Cranbrook Telephone Co.'s line between Cranbrook and Fernie, B.C., a distance of 30 miles, has been completed, and work has been commenced on a line to Coldstream Valley.

The St. Philemon Telephone Co. has recently opened stations at St. Paul du Bouton, Marceau and Chabot, Que. By arrangement with the Bell Telephone Co., connections are made with that company's lines.

Joint meetings of the Farmers' Institute Clubs of Caledon, Mono Mills and Charlton, Ont., have been held to consider the possibility of establishing a co-operative system of rural telephones in the districts named.

The Muskoka Independent Telephone System, Huntsville, Ont., has been granted the privilege of erecting poles in Huntsville for 18 years, provided 10 miles of telephone line is constructed and in operation by Sept. 28, 1909.

The Dominion Government has under consideration a bill, to be introduced during the current session of Parliament, having for its object the bringing of telephone and telegraph companies under the control of the Board of Railway Commissioners, which it is proposed to enlarge for the purpose.

The Brockville, Ont., town council is negotiating with the Bell Telephone Co. for the betterment of the service in the town, and for the reduction of charges. The franchise expired Dec. 31, and the adoption of an independent, or municipal, telephone system is favored in some quarters.

The Bell Telephone Co.'s new College exchange, Toronto, was opened for business Dec. 15, when about 4,000 instruments were transferred there from other exchanges. At the new exchange there are 150 operators, about half of that number being already expert, the remainder being in training.

The South Norfolk, Man., municipal council has passed a resolution calling upon the Provincial Minister of Telephones to make a survey of the municipal lines and prepare estimates of the cost per year to subscribers to the local telephone system, on the basis of the number of subscribers already secured.

The Dereham Telephone Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $30,000, and offices at Brownsville, to carry on a telephone business in Dereham tp. The provisional directors are: R. W. Hawkins, J. Harris, J. W. Hopkins, S. A. Freeman, H. Marshall, and K. E. Freeman Dereham Ont.

The Lobo Telephone Co., Ltd., has been incorporated under the Ontario Companies Act, with offices at Coldstream, Lobo Township, and a capital of $10,000. The provisional directors are: N. A. Graham, D. A. Graham, A. J. Graham, A. Stoner, J. A. Smith, A. E. McKay, P. L. Graham, H. J. Marsh, J. Marsh and D. R. Owens, Lobo, Ont.

The Alberta Public Works Department has taken over the Macleod telephone exchange, thus making a total of 18 exchanges operated by the Government, which controls 500 miles of telephone line, and 44 toll stations. The long distance line from Frank to Pincher

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Each child was in the Hospital 47½ days at a cost of $1.31 each per day, or $62.22 for the 47½ days stay.

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BEFORE. AFTER.

If you know of any child in your county who is sick or has club feet, and whose parents can not afford to pay, send the name to the Hospital Secretary.

The stock books are open. Won't you let the Hospital write your name down for a few shares in Heaven's own work of healing little children?

A great mine of Mercy—the mining stock that always pays dividends—is bought with the money that helps The Hospital for Sick Children to extract the Gold of Life from the Quartz of Death.

EYE CASES.

Please send contributions to J. Ross Robertson, Chairman, or to Douglas Davidson, Sec.-Treas., of the Hospital for Sick Children, College Street, Toronto.

Creek, has been opened for service, and the extension to Macleod was expected to be ready by the end of Dec., 1907.

The Princeton and Drumbo Telephone Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $20,000 and offices at Princeton, Ont., to carry on a telephone business in Blenheim, East Oxford and Blandford tps., Ont. The provisional directors are: F. J. Daniel, W. H. Wells, T. Conway, W. Courtney, D. Blackmore, A. C. Misner, Princeton; W. A. Elmes, Burford; and W. Murray, Drumbo.

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NIAGARA NAVIGATION CO., LIMITED.

NOTICE is hereby given that a dividend of four per cent. (being at the rate of eight per cent. for the year) has been declared upon the capital stock of this Company, and the same will be payable on the 2nd of January, 1908.

The Transfer Books will be closed from the 17th December to 31st December, 1907, both days inclusive.

The Annual Meeting of the shareholders will be held on Tuesday, the 14th of January, 1908, at noon, at the office of Messrs. Osler & Hammond, 21 Jordan St., Toronto.

By order of the Board,

E. B. OSLER, President.

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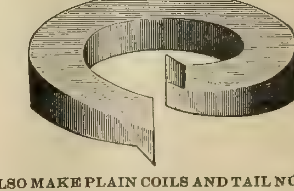

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the Alberta Government telephone system. Communication has been opened up between Edmonton and Beaver Hills, Bruderheim, Lamont, Chipman, Mundare, and Vegreville. The exchange office at Vegreville has 65 instruments, the other places being small have only toll offices. The lines connecting Wetaskiwin, Gwynne, Rosenoll, Camrose, Bawlf, Ohaton and Daysland; and Lacombe, Chigwell, Valley City, Tees, Alix, Content, Erskine and Stettler, are also open for business. It was hoped that the line east of Vegreville would be completed before the end of Dec., 1907, and also the trunk line from Vermillion to Lloydminster.

The Manitoba Government is negotiating with the Bell Telephone Co. for the purchase of its system in that province, and a series of conferences has taken place between Hon. R. P. Roblin, Premier, and C. F. Sise, President, and C. F. Sise jr., General Superintendent of the company, to discuss the probabilities of the transfer. It is understood that the Bell Telephone Co. is willing to retire from the province, provided acceptable terms can be arranged, and, also, that the Saskatchewan and Alberta Governments will also take over the systems in their respective provinces on similar terms. It is stated that the Bell Telephone Co. has mentioned $4,000,000 as the price at which it is willing to dispose of its Manitoba system to the Provincial Government. Manitoba has spent about $200,000 on surveys and construction for its public system, and a large amount of work is outlined for the spring.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Advertising Matter
Valentine & Sons Publishing Co..........Montreal.

Aerated Waters
E. L. Drewry........................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co....................Toronto.
Canadian Westinghouse Co......Hamilton, Ont.

Ales
E. L. Drewry........................Winnipeg.

Angle Bars
Hamilton Steel & Iron Co......Hamilton, Ont.

Automobiles
Polson Iron Works, Ltd ....Toronto.

Axes
James Smart Mfg. Co...........Brockville, Ont.

Axe Steel
Montreal Steel Works................Montreal.

Axles
James Hutton & Co...................Montreal.
Jas. W. Pyke & Co...................Montreal.
Rhodes, Curry & Co..............Amherst, N.S.
Taylor & Arnold.....................Montreal.

Badges
R. Woodman Mfg. & Supply Co....Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co....Boston, Mass.

Bearings, Side
Chicago Railway Equipment Co.....Chicago, Ill.

Blankets and Bedding
The Hudson's Bay Co.........................

Blasting Powder
Standard Explosives Limited..........Montreal.

Boilers
Babcock & Wilcox (Ltd.).............Montreal.
Canada Foundry Co....................Toronto.
Jno.McDougall,Caledonian IronWorks Co. Montreal
Polson Iron Works....................Toronto.
Robb Engineering Co.............Amherst, N.S.

Boilers, Internally Fired
Robb Engineering Co.............Amherst. N.S.

Boilers, Portable
Canada Foundry Co....................Toronto.
Robb Engineering Co.............Amherst, N.S.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.).............Montreal.
Canada Foundry Co....................Toronto.
Robb Engineering Co.............Amherst, N.S.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.).............Montreal.
Robb Engineering Co.............Amherst, N.S.

Boilers, Water Tube
Babcock & Wilcox (Ltd.).............Montreal.
Jno. McDougall,Caledonian Iron Works Co.Montreal
Robb Engineering Co.............Amherst, N.S.

Boilers Tubes
Jas. W. Pyke & Co...................Montreal.

Bolsters
Dominion Car and Foundry Co........Montreal.

Bolts, Bridge
Canada Foundry Co....................Toronto.
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Canada Foundry Co....................Toronto.
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited.....................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.
N. J. Holden Co., Ltd................Montreal.
Railway Materials Co............... New York.

Brass and Copper Cloth
The B. Greening Co............. Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited ....Toronto.

Bridges
Canada Foundry Co....................Toronto.
Canadian Bridge Co...........Walkerville, Ont.
Dominion Bridge Co..................Montreal.
Steel Concrete Co. (Ltd.)............Montreal.

Buckets, Coal, Ore and Concrete
Kilgore-Peteler Co...........Minneapolis, Minn.

Bumping Posts
McCord & Co.....................Chicago, Ill.
Mechanical Mfg. Co...............Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co..New York.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co...............Montreal.

Caboose Heaters
Geo. R. Prowse......................Montreal.

Caps
W. H. Coddington.............Hamilton, Ont.

Car Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Car Cleaner
Modoc Soap Co...............Philadelphia, Pa.

Car Closets
Duner Co........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd................Montreal.

Car Furnishings
G. S. Wood......................Chicago, Ill.

Car Heating
Wm. C. Baker Heating & Supply Co..New York.
Canadian Gold Car Heating & Lighting Co.Montreal.
Safety Car Heating and Lighting Co...New York.
Peter Smith Heater Co...........Detroit, Mich.

Car Jacks
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.

Car Kitchen Equipments
Geo. R. Prowse......................Montreal.

Car Lighting
Bliss Electric Car Lighting Co...Milwaukee, Wis.
Consolidated Ry. Electric Light. & Equip. Co., N.Y.
Canadian Cold Car Heating & Lighting Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
R. Woodman Mfg. & Supply Co ....Boston,-Mass

Car Ranges
Geo. R. Prowse......................Montreal.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd................Montreal.
F H. Hopkins & Co..................Montreal.

Car Seals
R. Woodman Mfg. & Supply Co.....Boston, Mass.

Car Wash Brushes
Wolfe Brush Co................Pittsburg, Pa.

Cars
Canada Car Co., (Ltd) ....Montreal, Que.
Crossen Car Mfg. Co.............Cobourg, Ont.
Dominion Car and Foundry Co........Montreal.
J. T. Gardner ....Chicago, Ill.
Hart-Otis Car Co. (Ltd.) ....Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Rhodes Curry & Co..............Amherst, N.S.

Cars, Coal
Kilgore-Peteler Co...........Minneapolis, Minn.

Cars, Mine
Kilgore-Peteler Co...........Minneapolis, Minn.

Car Windows
O. M Edwards...................Syracuse, N.Y.

Castings
Crossen Car Mfg. Co.............Cobourg, Ont.

Castings, Brass
Canadian Bronze Co..................Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co...............Walkerville, Ont.
St. Thomas Brass Co..........St. Thomas, Ont.

Castings, Iron
Canada Car Co., Ltd.................Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co...............Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co..Mahwah, N.J.

Castings, Malleable
Taylor & Arnold.....................Montreal.

Castings, Steel
Canadian Iron and Foundry Co........Montreal.
Montreal Steel Works................Montreal.
Rhodes Curry & Co..............Amherst, N.S.

Cast-Steel Hammers
American Brake Shoe & F'dry Co...Mahwah, N J.

Cast-Steel Track Tools
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cast-Steel Wrenches
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cement Machinery
Jas. W. Pyke & Co...................Montreal.

Chains
B J Coghlin & Co....................Montreal.

Charcoal Iron Staybolt Bars
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio

Chimneys
Steel Concrete Co. (Ltd.)............Montreal.

Coal Haulage Ropes
The B. Greening Co.............Hamilton Ont.

Coal Storage Plants
Steel Concrete Co. (Ltd.)............Montreal.

Concrete Mixers and Rock Crushers
Goold, Shapley & Muir Co.......Brantford, Ont.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co..............Toronto.

Concrete Pipe
Steel Concrete Co. (Ltd.)............Montreal.

Contractors' Plant
M. Beatty & Sons................Welland, Ont.
J. T. Gardner ....Chicago, Ill.
F. H. Hopkins & Co..................Montreal.
The W. H. Kelson Co.................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co..............Toronto.
Vulcan Iron Works Co...........Toledo, Ohio.

Contractors' Supplies
F. H. Hopkins & Co..................Montreal.
Rice Lewis & Son.....................Toronto.
Toronto Pressed Steel Co..............Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.).............Montreal.

Cooking Apparatus
Geo. R. Prowse......................Montreal.

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Continental Iron Works.......Brooklyn, N.Y.

Cotton Duck
M. McKenzie Co., Limited.......Montreal.

Counter Dusters
Wolfe Brush Co.......Pittsburg, Pa.

Couplers, Car and Locomotive
Latrobe Steel & Coupler Co.......Philadelphia, Pa.
McConway & Torley Co.......Pittsburg, Pa.
National Malleable Castings Co.......Cleveland, Ohio.
Washburn Steel Castings & Coupler Co.,
.......Minneapolis, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co.......Toronto.

Cross Arm Braces
Canadian General Electric Co.......Toronto.
Toronto Bolt and Forging Co.......Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co.......Toronto.

Crowbars
B. J. Coghlin & Co.......Montreal.
Toronto Bolt and Forging Co.......Toronto.

Culverts
Steel Concrete Co. (Ltd.).......Montreal.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co, Hamilton.

Cuts
Acton Burrows Limited.......Toronto.

Derailing Devices
Hayes Track Appliance Co.......Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co.......Montreal.
The B. Greening Co.......Hamilton, Ont.

Derricks
M. Beatty & Sons.......Welland, Ont.
Miller Bros. & Toms.......Montreal.
Mussens Limited.......Montreal.

Diaphragms for Vestibules
G. S. Wood.......Chicago, Ill.

Dies
Butterfield & Co.......Rock Island, Que.

Diving Outfits
John Date.......Montreal.
Mussens Limited.......Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards.......Syracuse, N.Y.

Door Signs
Acton Burrows Limited.......Toronto.

Draft Gear
Farlow Draft Gear Co.......Baltimore, Md.
McCord & Co.......Chicago, Ill.
Standard Coupler Co.......New York City.

Drawing Materials
Eugene Dietzgen Co., Ltd.......Toronto.
James Foster.......Toronto.

Dredges
M. Beatty & Sons.......Welland, Ont.
Vulcan Iron Works Co.......Toledo, Ohio.

Drills
W. Abbott.......Montreal.

Drills, Twist
Baldwin Steel Co.......New York.

Dry Goods
The Hudson's Bay Co.......

Dump Cars (Contractors')
F. H. Hopkins & Co.......Montreal.
Kilgore-Peteler Co.......Minneapolis, Minn.
Toronto Pressed Steel Co.......Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co.......Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.).......Montreal.

Electric Car Route Signs
Acton Burrows Limited.......Toronto.

Electric Cranes
Babcock & Wilcox.......Montreal.
Canada Foundry Co.......Toronto.
Dominion Bridge Co.......Montreal.
Mussen Limited.......Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co.......Mahwah, N J.

Electrical Fuses
Standard Explosives Limited.......Montreal.

Enameled Iron Signs
Acton Burrows Limited.......Toronto.

Engineers' Supplies
Canadian Fairbanks Co.......Montreal.

Engines, Automatic
Robb Engineering Co.......Amherst, N.S.

Engines, Corliss
Robb Engineering Co.......Amherst, N.S.

Engines, Gasoline
Canadian Fairbanks Co.......Montreal.
Goold, Shapley & Muir Co.......Brantford, Ont.
Ontario Wind Engine and Pump Co.......Toronto.

Engines, Hoisting
M. Beatty & Sons.......Welland, Ont.

Engines, Stationary and Marine
Canada Foundry Co.......Toronto.
Polson Iron Works.......Toronto.
Robb Engineering Co.......Amherst N.S

Excavators
Vulcan Iron Works.......Toledo, Ohio.

Explosives
Standard Explosives Limited.......Montreal.

Express Office Signs
Acton Burrows Limited.......Toronto

Feedwater Heaters
Canadian Fairbanks Co.......Montreal.
Robb Engineering Co.......Amherst, N.S.

Fencing
Banwell-Hoxie Fence Co.......Hamilton, Ont.
Canada Foundry Co.......Toronto.
McGregor Banwell Fence Co.......Walkerville, Ont.
Owen Sound Wire Fence Co.......Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Fire Brick
Mussens Limited.......Montreal.
F. B. Stevens.......Detroit, Mich.

Fire Clay
F. B Stevens.......Detroit, Mich

Flags
The Hudson's Bay Co.......

Flour
The Hudson's Bay Co.......

Forgings
Canada Car Co., Limited.......Montreal.
Crossen Car Mfg. Co.......Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd.......Hamilton, Ont.
Standard Steel Works.......Philadelphia, Pa.

Foundry Facings
F. B. Stevens.......Detroit, Mich.

Foundry Supplies
F. B. Stevens.......Detroit, Mich.

Fuse Batteries
Standard Explosives Limited.......Montreal.

Fuse Detonators
Standard Explosives Limited.......Montreal.

Gaskets
McCord & Co.......Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Gates
Banwell-Hoxie Fence Co.......Hamilton, Ont.
Canada Foundry Co.......Toronto.
McGregor Banwell Fence Co.......Walkerville, Ont.
Owen Sound Wire Fence Co.......Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Gauges, Locomotive Steam
Golden-AndersonValve SpecialtyCo., Pittsburg, Pa.

Glue Brushes
Wolfe Brush Co.......Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co.......Chicago, Ill.

Groceries
The Hudson's Bay Company.......

Hammers
James Smart Mfg. Co.......Brockville, Ont.

Handcars
Crossen Car Mfg. Co.......Cobourg, Ont.
F. H. Hopkins & Co.......Montreal.
Mussens Limited.......Montreal.
Rice Lewis & Son.......Toronto.
Toronto Pressed Steel Co.......Toronto.

Hardware
The Hudson's Bay Co.......
Rice Lewis & Son.......Toronto.

Hats
W. H. Coddington.......Hamilton, Ont.

Headlights
The N. L. Piper Railway Supply Co.......Toronto.
Pyle National Electric Head Light Co.Chicago, Ill.

Headlinings
Crossen Car Mfg. Co.......Cobourg, Ont.

Hoisting Machinery
Brown Hoisting Machinery Co.......Cleveland, Ohio

Hollow Staybolt Iron and Steel Bars
Falls Hallow Staybolt Co.......Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co.......Chicago, Ill

Hose, Air Brake and Steam
G. S. Wood.......Chicago, Ill

Hydrants
Kerr Engine Co.......Walkerville, Ont.

Illustrations
Acton Burrows Limited.......Toronto.

Inspections
R W. Hunt & Co.......Montreal.

Instruments, Surveying and Engineering
Eugene Dietzgen Co., Ltd.......Toronto
James Foster.......Toronto.

Interlocking Signals
Montreal Steel Works.......Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd.......Hamilton, Ont.

Iron, Bar
Taylor & Arnold.......Montreal.

Iron, Pig
Hamilton Steel & Iron Co., Ltd.......Hamilton, Ont.

Iron Signs
Acton Burrows Limited.......Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co.......Cuyahoga Falls, Ohio.

Jacks
James Smart Mfg. Co.......Brockville, Ont.

Japans
McCaskill, Dougall & Co.......Montreal.

Journal Bearings
Canada Foundry Co.......Toronto.
Canadian Bronze Co.......Montreal.
Crossen Car Mfg. Co.......Cobourg, Ont.
Kerr Engine Co.......Walkerville, Ont.
Jas W. Pyke & Co.......Montreal.
St Thomas Brass Co.......St. Thomas, Ont.

Journal Boxes
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McCord & Co.......Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co.......Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry.......Winnipeg.

Lamps, Incandescent
Canadian Westinghouse Co.......Hamilton Ont.

Lamps and Lanterns
The Hudson's Bay Company.......
The Hiram L. Piper Co.......Montreal.
The N. L. Piper Railway Supply Co.......Toronto.

Launches
Polson Iron Works.......Toronto.

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Mussens Limited.......Montreal.

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American Brake Shoe & F'dry Co.......Mahwah, N.J.
Canadian Iron and Foundry Co.......Montreal.

Locomotive Lagging and Covering
Canadian Fairbanks Co.......Montreal
Taylor & Arnold.......Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.......Kingston, Ont.
Locomotive and Machine Co of Montreal.
H. K. Porter Co.......Pittsburg, Pa

Locomotives (Electric)
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co.......Toronto.
Locomotive and Machine Co. of Montreal.

Locomotives (Logging)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.......Kingston, Ont.

Locomotives (Rack)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.......Kingston, Ont.
Locomotive and Machine Co. of Montreal.

Locomotives (Steam)
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co.......Toronto.
Canadian Locomotive Co.......Kingston, Ont.
J. T. Gardner.......Chicago, Ill.
The W. H Kelson Co.......Montreal.
Locomotive and Machine Co. of Montreal.
H. K. Porter Co.......Pittsburg, Pa.
Vulcan Iron Works.......Wilkesbarre, Pa.

Locomotive Staybolts
Falls Hollow Staybolt Co.......Cuyahoga Falls, Ohio.
Flannery Bolt Co.......Pittsburg, Pa.

Lubricators
McCord & Co.......Chicago, Ill
Taylor & Arnold.......Montreal.

Machine Tools
W. Abbott.......Montreal.
Canadian Fairbanks Co.......Montreal.

Machinery, Power
Jno. McDougall,Caledonian IronWorks Co.Montreal

Machinery Special
Miller Bros. & Toms.......Montreal

Machinery, Transmission
Miller Bros. & Toms.......Montreal.

Manganese Steel Castings
Montreal Steel Works.......Montreal.

Manhole Frames and Covers
American Brake Shoe & F'dry Co.......Mahwah, N.J.
Canadian Iron and Foundry Co.......Montreal.

Marine Supplies
Rice Lewis & Son....................Toronto.

Milepost Numbers
Acton Burrows Limited................Toronto.

Milling Cutters
W. Abbott..........................Montreal.
Baldwin Steel Co...................New York.

Motors
McCord & Co......................Chicago, Ill.

Nickel
The Orford Copper Co...............New York.

Nickel for Nickel Steel
The Orford Copper Co...............New York.

Numbers
Acton Burrows Limited................Toronto.

Nut Locks
Positive Lock Washer Co.......... Newark, N.J.

Nuts, Square and Hexagon
Canada Foundry Co....................Toronto.
Toronto Bolt and Forging Co..........Toronto.

Oakum
The Hudson's Bay Company...................
M. McKenzie Co., Limited............Montreal.

Office Fittings
Canadian Office & School Furniture Co., Preston, Ont.

Office Signs
Acton Burrows Limited................Toronto.

Oil Furnaces
Railways Materials Co..............New York.

Oil Tank
S. F. Bowser & Co., Limited.........Toronto.

Oils
Canadian Oil Co......................Toronto.
Galena Signal Oil Co. Franklin, Pa., and Toronto.

Packing
The N. L. Piper Railway Supply Co....Toronto.

Paint Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Paints
Canadian Oil Co......................Toronto.

Pictorial Post Cards
Valentine & Sons Publishing Co........Montreal.

Pinch Bars
The N. L. Piper Railway Supply Co....Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co..New York.

Pipe Covering
Canadian Fairbanks Co...............Montreal.

Pipe Stocks
Butterfield & Co.............Rock Island, Que.

Platforms, Steel
Standard Coupler Co...............New York City.

Plating Compositions
F. B. Stevens......................Detroit, Mich.

Ploughs, Contractors'
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co.............Toronto.

Plumbago
F. B. Stevens....................Detroit, Mich.

Pneumatic Tools
N. J. Holden Co., Ltd. ....Montreal.

Polishers' Supplies
F. B. Stevens....................Detroit, Mich.

Polishing Compositions
F. B. Stevens....................Detroit, Mich.

Porter
E. L. Drewry.......................Winnipeg.

Portable Boilers
Babcock & Wilcox (Ltd.).............Montreal.
Canada Foundry Co....................Toronto.
Robb Engineering Co...............Amherst, N.S.

Power Houses
Steel Concrete Co. (Ltd.)............Montreal.

Preservative for Hose
G. S. Wood.......................Chicago, Ill.

Printing
The Hunter Rose Co...................Toronto.
The Mail Job Printing Company........Toronto.

Pumps
S. F. Bowser & Co., Limited..........Toronto.
Canadian Fairbanks Co...............Montreal.
Canada Foundry Co....................Toronto.
Goold, Shapley & Muir Co......Brantford, Ont.
Ontario Wind Engine and Pump Co....Toronto.
James Smart Mfg. Co...........Brockville, Ont.

Pumps (Centrifugal)
M Beatty & Sons...............Welland, Ont.

Rail Benders, Roller
F. H. Hopkins & Co..................Montreal.
Montreal Steel Works................Montreal.

Rails (new)
Dominion Iron & Steel Co..........Sydney, N.S.
Drummond, McCall & Co...............Montreal.
J. T. Gardner....................Chicago, Ill.
J. J. Gartshore......................Toronto.
F. H. Hopkins & Co..................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.

Rails (for relaying)
F. H Hopkins & Co...................Montreal.
J. J. Gartshore......................Toronto.
Mussens Limited.....................Montreal.
Jas. W. Pyke & Co...................Montreal.

Rail Joints
The Rail Joint Co. of Canada.........Montreal.

Railway Pile Drivers
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.

Railway Supplies
Canadian Fairbanks Co...............Montreal.
The W. H. Kelson Co.................Montreal.
The Hiram L. Piper Co...............Montreal.
The N. L. Piper Railway Supply Co....Toronto.
Rice Lewis & Son.....................Toronto.

Reamers
W. Abbott...........................Montreal.
Baldwin Steel Co...................New York.
Butterfield & Co.............Rock Island, Que.

Refrigerators
Geo. R. Prowse......................Montreal.

Rivets, Boiler, Bridge and Structural
Canada Foundry Co....................Toronto.
Toronto Bolt and Forging Co..........Toronto.

Rolled Wheels
Standard Steel Works.........Philadelphia, Pa.

Roof Trusses
Canada Foundry Co....................Toronto.
Canadian Bridge Co..............Walkeville, Ont.
Dominion Bridge Co..................Montreal.

Rope
F. H. Hopkins & Co..................Montreal.
The Hudson's Bay Co..........................

Rotary Snow Ploughs
Crossen Car Mfg. Co...............Cobourg, Ont.

Roundhouses
Steel Concrete Co. (Ltd.)............Montreal.

Rubber Goods, Mechanical
G. S. Wood.......................Chicago, Ill.

Sash Balances
O. M. Edwards....................Syracuse, N.Y.

Sash Locks
O. M Edwards.....................Syracuse, N.Y.

Saw Steel
Montreal Steel Works................Montreal.

Scrapers (Wheel and Drag)
Bechtels Limited.................Waterloo, Ont.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co.............Toronto.

Screw Plates
Butterfield & Co.............Rock Island, Que.

Screws, Coach and Lag
Toronto Bolt and Forging Co..........Toronto.

Semaphore Arms
Acton Burrows Limited................Toronto.

Semaphores
The N. L. Piper Railway Supply Co....Toronto.

Sewer Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Shade Rollers
O. M. Edwards....................Syracuse, N.Y.

Shafting, Hollow
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Shaking Grates
Babcock & Wilcox (Ltd.).............Montreal.

Ship Lamps
The Hiram L. Piper Co...............Montreal.
The N. L. Piper Railway Supply Co....Toronto.

Ships
Polson Iron Works....................Toronto.

Shop Furnaces
Railways Materials Co..............New York.

Shops
Steel Concrete Co. (Ltd.)............Montreal.
The Hudson's Bay Co..........................

Side Bearings
Dominion Car and Foundry Co.........Montreal.

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LIMITED

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See Purchasing Agents' Guide
on page 149

See Alphabetical Index to
Advertisements on page 115.

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Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph,
Telephone and Contractors' interests

Old Series, No. 202.
New Series, No. 120.

TORONTO, CANADA, FEBRUARY, 1908.

For Subscription Rates,
See page 115.

Duluth-Winnipeg Coal Rate.

Chief Commissioner Killam delivered the following judgments of the Board of Railway Commissioners recently:

"This is an application by the Great Northern Ry. Co., a foreign company, which operates a line of railway in the United States, connecting at the boundary line between Manitoba and the United States with the line of the Canadian Northern Ry. Co., which is a company owning and operating a line of railway in Canada, and is subject to the legislative authority of the Parliament of Canada, for a reduction on the rate for the carriage of coal from Duluth, Minn., to Winnipeg, Man., over the lines of the two companies. At present there is a joint tariff of the two companies for this traffic, under which the rate charged is $3 a ton, and the proportion allowed to the C.N.R. Co. is 75c. per ton. The G.N.R. Co. desires to have the rate reduced to $2.50 a ton, allowing the C.N.R. Co. 75c. a ton, as before.

"Objection has been made to the jurisdiction of the Board to interfere, because of the G.N.R. Co. being a foreign corporation, and no portion of its railway being in Canada. The joint tariff was required by sec. 836 of the Railway Act, by which 'as respects all traffic which shall be carried from any point in a foreign country into Canada, or from a foreign country through Canada into a foreign country, by any continuous route owned or operated by any two or more companies, whether Canadian or foreign, a joint tariff for such continuous route shall be duly filed with the Board.'

"Similarly, sec. 335 required a joint tariff where traffic is to pass over any continuous route from a point in Canada, through a foreign country into Canada, or from any point in Canada to a foreign country.

"The portion of the Railway Act dealing with the tariffs and tolls begins with sec. 314, but the first section, which appears to be of importance in the consideration of the question thus raised is 322, under which 'The Board may disallow any tariff or any portion thereof which it considers to be unjust or unreasonable, or contrary to any of the provisions of this act, and may require the company, within a prescribed time, to substitute a tariff satisfactory to the Board in lieu thereof, or may prescribe other tolls in lieu of the tolls so disallowed.'

"Sec. 325 specifies the kinds of 'tariffs or tolls which the company shall be authorized to use under this act for the carriage of goods between points on the railways'; and sec. 330, those 'for the carriage of passengers between points on the railway.'

"By sec. 333, 'Where traffic is to pass over any continuous route in Canada operated by two or more companies, the several companies may agree upon a joint tariff for such continuous route,' and

"By sec. 334, 'In the event of failure by such companies to agree upon any such joint tariff . . . The Board . . . may require such companies, within a prescribed time, to agree upon and file in like manner a joint tariff for such continuous route, satisfactory to the Board, or may, by order, determine the route, fill the toll or tolls and apportion the same among the companies interested.

J. G. SULLIVAN,
Manager of Construction, C.P.R. Eastern Lines.

"Then come the clauses already cited requiring joint tariffs where the carriage is partly over a foreign railway.

"By sec. 338, 'Joint tariffs shall, as to the filing and publication thereof, be subject to the same provisions in this act as are applicable to the filing and publication of local tariffs of a similar description; and upon any such joint tariff being so duly filed with the Board, the company or companies shall until such tariff is superseded or disallowed by the Board, charge the toll or tolls as specified therein; provided that the Board may except from the provisions of this section the filing and publication of any or all passenger tariffs of foreign railway companies.'

"'2. The Board may require to be informed by the company of the proportion of the toll or tolls, in any joint tariff filed which it or any other company, whether Canadian or foreign, is to receive or has received.'

"Sec. 339 requires each company to 'deposit and keep on file in a convenient place, open for inspection of the public during office hours, a copy of each of its tariffs; and then specifies the different classes of tariffs to be so deposited, etc., among them being the joint tariffs required by secs. 335 and 336; and subsec. 4 of sec. 339 empowers the Board to determine the manner and form in which any such tariff shall be published, etc., and to exempt from publication the joint tariffs required by secs. 335 and 336.

"Now, undoubtedly the Board cannot directly affect, or enforce orders against foreign railway companies not operating lines of railway in Canada, the word 'company' used throughout most of the clauses referred to, must relate solely to companies operating railways in Canada. In some cases, however, foreign companies are specifically mentioned, and the law must be applied to them to the extent specified by the statute, and to which it can be reasonably and practically applied.

"The joint tariffs referred to in sec. 338 must include the joint tariffs required by secs. 335 and 336. The proviso as to passenger tariffs of foreign railway companies and the express including of foreign companies in subsec. 2, show this, and the section seems to imply that any such tariffs may be superseded or disallowed by the Board.

"Having reference to the general powers of the Board and the scheme of the Act as regards railway tariffs and tolls, it would only seem reasonable that the Board should have a power of disallowance of such tariffs in order to prevent the charging of unjust or unreasonable tolls or such as are contrary to any of the provisions of the Railway Act; and subsec. 2 of sec. 338 enables the Board to ascertain the proportion of the joint tariff rates to be received by any company, Canadian or foreign, and thus places the Board in a position to substitute other tolls by addition to or reduction from such portions.

"The powers given by sec. 323, with reference to tolls, are given before the description of the various kinds of tariffs which may be made. The act does not, except by the application of sec. 322, provide for disallowance by the Board of joint tariffs voluntarily made by two Canadian companies. It must have been intended

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CHARLES MILLER,

PRESIDENT.

that these should be included among the tariffs which could be disallowed, or for which others might be substituted by the Board under sec. 323.

"I think we must construe that section as including all the various descriptions of tariffs referred to in the Act, and that the Board is empowered to exercise with reference to all these the powers given by the Act to the extent and in the manner that is practicable. It can prohibit Canadian companies from joining in the carriage of traffic from points in a foreign country into Canada, or from points in Canada to a foreign country, if a satisfactory joint tariff be not filed. It can require that the tolls to be charged for carriage on a Canadian railway to a junction with a foreign railway be just and reasonable and conformable to Canadian law, leaving those to be charged for carriage on a foreign railway to be regulated by the foreign law. It can require a Canadian company to enter into a joint tariff with a foreign company, which is willing to adopt a reasonable tariff.

"It appears to me that, in a case like the present, where the foreign company asks and offers to enter into a joint tariff under which its portion of the service will be performed at lower rates, this Board can require the Canadian railway to join in such a tariff, and can limit the proportion to be received by the Canadian company.

"It does not, however, appear to me that the mere fact that the Canadian company has enjoyed a certain rate under the previous tariff is conclusive to determine that it should not receive a higher proportion under the new tariff. Many circumstances may well be taken into consideration in determining this question. The proposed new rate is not lower than that charged by the Canadian companies for carriage from Canadian ports on Lake Superior to Winnipeg. The distances are very nearly the same. This goes far to make out a prima facie case in favor of the reasonableness of the rate proposed. But the parties have not been heard upon these matters.

"The application is of a novel character. No principles have yet been established by the Board to govern its action in such cases. Full opportunity should be given to parties affected, or likely to be affected, by the chance to adduce evidence and present their contentions before the Board, and I do not think that we should attempt to limit them in advance. The matter must be again brought on for hearing."

Partial hearings of the case were held at Fort William and at Winnipeg, and a further hearing was fixed for Ottawa, Jan. 28.

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February Birthdays.

Many happy returns of the day to—

S. A. Baker, Canadian Freight and Passenger Agent, Chicago Great Western Ry., Toronto, born at Morrisburg, Ont., Feb. 1, 1877.

B. H. Bennett, General Agent Chicago and North-Western Ry., Toronto, born at Cobourg, Ont., Feb. 6, 1858.

F. L. C. Bond, Resident Engineer G.T.R., Montreal, born there Feb. 21, 1877.

F. W. Churchill, C.P.R. Ticket Agent, Collingwood, Ont., born in London, Eng., Feb. 6, 1853.

H. R. Charlton, Advertising Agent G.T.R., Montreal, born at St. John's, Que., Feb. 9, 1866.

F. W. Cooper, Resident Engineer C.P.R., London, Ont., born there Feb. 16, 1880.

R. Crawford, Northwest Agent Northern Navigation Co., Winnipeg, Man., born at Kingston, Ont., Feb. 21, 1870.

E. A. Evans, General Manager and Chief Engineer Quebec Ry., Light and Power Co., Quebec, born at Kensington, London, Eng., Feb. 26, 1855.

E. H. Fitzhugh, Third Vice-President G.T.R. and Vice-President Central Vermont Ry., Montreal, born in Montgomery County, Mo., Feb. 1, 1853.

L. O. Genest, General Storekeeper, C.P.R. Western Lines, Winnipeg, Man., born at St. Henri, Levis County, Que., Feb. 16, 1856.

W. Jackson, C.P.R. ticket agent, Clinton, Ont., born there Feb. 4, 1860.

C. Gardiner Johnson, Lloyd's Agent for British Columbia, Vancouver, B.C., born at Dumblane, Perthshire, Scotland, Feb. 8, 1857.

R. S. Logan, Assistant to 2nd Vice-President and General Manager G.T.R., Montreal, born at St. Louis, Mo., Feb. 13, 1864.

D. MacPherson, Assistant Chief Engineer Transcontinental Ry. Commission, Ottawa, born at Bath, Ont., Feb. 2, 1858.

C. S. Maharg, Superintendent Dist. 3, C.P.R., Brandon, Man., born in Dufferin County, Ont., Feb. 4, 1867.

T. McNabb, Master Mechanic Alberta Ry. and Irrigation Co. at Lethbridge, Alta., born in Scotland, Feb. 16, 1849.

A. H. Robinson, Superintendent Elgin and Havelock Ry., at Petitcodiac, N.B., born at Elgin, N.B., Feb. 2, 1862.

A. E. Rosevear, Freight Claim Agent G.T.R. at Montreal, born Feb. 20, 1863.

H. H. Schaefer, District Freight Agent Intercolonial Ry., St. John, N.B., born at Cologne, Germany, Feb. 10, 1848.

J. G. Scott, General Manager Quebec and Lake St. John Ry., Quebec, born there Feb. 13, 1847.

G. Spencer, Superintendent C.P.R., North Bay, Ont., born in London, Eng., Feb. 21, 1865.

Hugh Sutherland, Executive Agent Canadian Northern Ry., Winnipeg, Man., born at New London, P.E.I., Feb. 22, 1845.

J. B. Tinning, Travelling Passenger Agent C.P.R. Atlantic S.S. Lines, Toronto, born there Feb. 21, 1866.

J. W. Troup, Superintendent C.P.R. Pacific Coast Steamships, Vancouver, born Feb. 5, 1855.

Sir Wm. C. VanHorne, K.C.M.G., Chairman C.P.R. and President Cuba Co., Montreal, born in Will County, Ill., Feb., 1843.

◆

Brockville, Westport and Northwestern Railway.

Following are extracts from the annual report for the year ended June 30, 1907: The general balance sheet shows current assets totalling $1,433,015.79. The company has spent large sums in permanent improvements during the year, and it is the intention to put a much larger sum into the roadbed during the coming year. The balance of improvements to June 30, 1906, together with the outlays since that date to June 30, 1907, total $48,136.41. The cash on hand at the close of the year was $5,901.22.

GAIN AND LOSS ACCOUNT.

Maintenance of way	$ 3,087.54
Maintenance equipment	1,646.49
Conducting transportation	17,318.99
General expenses	5,014.35
Bond interest	18,000.00
Taxes	911.33
Wear and tear (implements)	4,813.64
N.Y. financial expenses	3,122.84
Current interest	407.87
Suspense account and sundries	512.28
Surplus account	7,187.67
Total	$62,023.00

Passenger traffic	$30,486.73
Freight traffic	27,154.17
Mail service	3,369.60
Express	931.25
Sundry income	81.25
Total	$62,023.00

The gross earnings derived from the operations of the present line of completed road show a substantial and steady increase each year. A comparison of the annual earnings and operating expenses for the last five years is given as follows:

	Earnings.	Expenses.
1903	$44,461.74	$32,733.14
1904	48,431.25	30,792.66
1905	54,045.76	30,145.74
1906	59,378.99	29,748.85
1907	62,023.00	27,067.37

Comparison of earnings for year ending June 30, 1907, with those of previous year:

	1906	1907
Passengers	$28,518.15	$30,486.73
Freight	26,344.85	27,154.17
Mail	3,378.80	3,369.60
Express	830.59	931.25
Other sources	246.60	81.25
Total	$59,318.99	$62,023.25

There was expended during the year on equipments, rolling stock, roadway and structures, $24,777.33, as compared with $14,115.69 in 1906. The excess of gross earnings over gross operating expenses for the year was $34,955.63. In 1906, the line carried 69,110 passengers; in 1907, 73,468, an increase of 4,358.

A comparison of the freight traffic of the past two years shows·

	Tons Weight 1907	Tons Weight 1906
Flour in barrels	1,945	2,027
Grain (bushels)	3,556	2,975
Livestock, no. head	2,762	2,173
Lumber, all kinds	1,337	1,109
Coal and other fuel	1,915	1,183
Manufactured goods	7,766	8,520
All other articles	2,575	3,325
Total	21,865	21,312

The road is 45 miles long, with two miles of sidings; four locomotives, 10 passenger, mail and express cars, 18 box and platform cars with air brakes and auto-couplings, one snow-plow car, and three engine houses.

TRAFFIC AND MILEAGE STATISTICS.

Per cent. operating expenses to earnings. $	0.436
Gross earnings per mile road	1,378,288
Gross earnings per train mile	1,059
Operating expenses per mile of road	601,497
Operating expenses per train mile	0.462
Average cost of maintenance of way, per mile of road	68.61
Average improvements to roadway, per mile of road	212.54
Miles run by passenger trains	30,150
Miles run by freight trains	295
Miles run by mixed trains	28,090
Total miles run by trains	58,535
Average rate of speed per hour, passenger trains	30 miles.
Average rate of speed per hour, freight trains	21 miles
Average rate of speed per hour, mixed trains	21 miles.

The report was adopted and the directors re-elected. Following are the officers and directors for the current year: President, E. R. Thomas, New York; Vice-President, J. Gerken, New York; Treasurer, F. T. Lewis, New York; Secretary and Manager, C. Heilshorn, New York; Superintendent and Assistant Manager, W. T. Curle, Brockville, Ont.; other directors: C. F. Thomas, New York; W. S. Buell, R. Bowie, W. H. Comstock, Brockville, Ont.; J. Cumming, Lyn, Ont.; W. C. Fridenburg, Westport, Ont. The changes made in the officers for the year are: F. T. Lewis succeeds C. F. Thomas as Treasurer; the position of Assistant Secretary and Treasurer, heretofore held by Mr. Van Tuyll, is abolished; C. Heilshorn has been appointed Manager as well as Secretary, and W. T. Curle has been made Assistant Manager as well as Superintendent.

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The G.T.R. has been approached by a deputation representing the Dominion Millers' Association, regarding the putting into effect of an export rate on flour based on the all-rail rate from Fort William to North Bay on Manitoba wheat. It is stated that both the G.T.R. and C.P.R. will shortly issue new tariffs, making the export rate via Portland, Boston and St. Louis, 1½c. per 100 lbs. over the present tariff to Montreal, and 2½c. per 100 lbs. to Halifax.

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HEAD OFFICE, MONTREAL

Orders by the Railway Commissioners.

4116. Dec. 9—Authorizing G.T.R. to construct a branch line from lot 259 to lot 246, near St. Lambert, Que.

4117. Dec. 18—Approving rearrangement of C.P.R. and Toronto Belt Line Co.'s tracks, and the installation of a diamond in the crossing, at rail level, of these tracks in Toronto.

4118. Dec. 18—Authorizing Georgian Bay and Seaboard Ry. Co. to carry its line over a highway in Tay tp., Ont., by means of an arch.

4119. Dec. 18—Authorizing Chief Commissioner to examine any witness that may appear before him to give evidence in application of the Great Northern Ry. Co. to require Can. Nor. Ry. Co. to concur in joint tariff of $2.50 a ton on coal from Duluth, Minn., to Winnipeg.

4120. Dec. 17—Authorizing C.P.R. to construct a branch line to the Franklin Realty and Trading Co.'s premises, Nokomis, B.C.

4121. Nov. 29—Authorizing municipal or highway authority to construct a highway over the Can. Nor. Ry. track in Dundurn, Sask.

4122. Dec. 18—Authorizing G.T. Pacific Ry. to operate its trains across C.P.R. and C.N.R. tracks at West Fort William, Ont., and that the said trains be allowed to pass over said crossing without stopping, subject to the Board's regulations.

4123. Dec. 17—Authorizing G.T.R. Co. to construct an additional track across highway at St. Bazile, Que.

4124. Dec. 10—Ordering G.T.R. and C.P.R. to make arrangements for transfer of passengers and mails between their lines at Brockville, Ont.

4125. Dec. 18 — Amending order 3258, dated July 6, 1907, re application of Canadian Manufacturers' Assn. and the shippers who were heard at Windsor and Chatham in May, 1906, by rescinding par. 1.

4126. Dec. 19—Authorizing Can. Nor. Ont. Ry. to construct its line over Queen St., Toronto.

4127. Nov. 18—Authorizing Huronian Co., Ltd., to carry a transmission line across Manitoulin and North Shore Ry. tracks, to the Canadian Copper Co.'s power-house, Creighton, Ont.

4128. Dec. 3—Authorizing Brantford and Hamilton Ry. to carry its track across the Brantford St. Ry. track in Brantford tp., Ont.

4129. Dec. 19—Approving Maritime Express Co.'s form MX27 and MX70, and permitting the company to use the same until Mar. 1, 1908.

4130. Dec. 17—Amending order 3987 of Oct. 29, 1907, re crossing of London and Port Stanley Ry. by London St. Ry.

4131. Dec. 17—Authorizing C.P.R. to construct certain branch lines in tp. 10, Algoma district, Ont.

4132. Dec. 19—Authorizing Chief Commissioner to examine any witnesses who may be produced before him to give evidence re the application of the Board of Trade of Portage la Prairie, Man., to disallow the C.P.R. freight tariffs W-1000, C.R.C. 644, and W-1006, C.R.C. 652, as being illegal; and re the applications of the Winnipeg and other boards of trade and shippers objecting to the new tariffs recently put in force by the C.P.R. in Western Canada in substitution for the "traders' tariffs" previously in existence.

4133. Dec. 21—Authorizing A. F. Dillinger, Operating Assistant to Chief Traffic Officer, to inquire into the complaint of S. Reibin, Secretary of the Doukhobor Society's trading store at Verigen, Sask., re certain charges or car service made by Can. Nor. Ry. on shipment to complainant by U.S. Steel Products Export Co. from Cleveland, Ohio.

4134 to 4139. Dec. 20—Authorizing the Bell Telephone Co. to place its wires across C.P.R. tracks at certain points.

4140. Dec. 20—Certifying that Walkerton and Lucknow Ry.'s location plan, approved by the Board Mar. 23, 1906, was in error, and approving amended plan.

4141. Dec. 20—Authorizing F. J. Robinson, Deputy Commissioner of Public Works for Saskatchewan, to construct a highway across the C.P.R. track in sec. 12, tp. 11, r. 34, Sask.

4142. Dec. 20 — Authorizing Canada Forge Co. to lay a gas main through the culvert under the G.T.R. track at Welland St., Welland, Ont.

4143. Dec. 20—Authorizing Can. Nor. Que. Ry. to construct its railway across existing highways on the east and west side of the River Batiscan, 67.7 west from Quebec bridge, Que., by providing a deviation of each of the highways.

4144. Ordering that at C.P.R. and G.T.R. crossings a mile west of Woodstock, Ont., the normal positions of the rails be at "danger" and the derail "open."

4145. Dec. 17—Granting a further extension of 60 days from Nov. 30, 1907, in the matter of the application of Can. Nor. Que. Ry. to use, for construction purposes, the crossing of its track with the C.P.R. track in Deschambault parish, Que., mileage 48.4 west from Quebec bridge.

4146. Dec. 9—Approving certain clauses of an agreement between the Great Northwestern Telegraph Co. and the Temiscouata Ry., and authorizing the railway company to carry the traffic upon the terms provided in the clauses.

4147. Dec. 20—Authorizing the G.T.R. to construct a branch line to the McBurney Lumber Co.'s premises, Campbellford, Ont., with three spurs extending therefrom.

4148. Dec. 9—Approving plan, profile, and book of reference of freight terminals which G.T.R. Co. proposes to construct near St. Lambert, Que.

4149. Dec. 23—Authorizing C.W. & L.E. Ry. to operate its trains for construction purposes only over C.P.R. track on Raleigh St., Chatham, Ont, providing that the C.W. & L.E.R. maintain a day and night watchman at the crossing, the watchmen to be appointed by the C.P.R. Co.

4150. Dec. 21—Authorizing J. E. Seagram to place electric wires over G.T.R. track in Waterloo, Ont.

4151. Dec. 21—Amending order 3961 of Nov. 22, 1907, authorizing the Can. Nor. Ry. to operate its trains on its tracks where they cross the C.P.R. tracks near Wahnapitae station, Ont., by striking out the last clause and substituting therefor the following: "That the trains of the applicant company and the C.N.R. Co. may pass over such crossing without being brought to a stop."

4152. Dec. 21—Authorizing John Morrow Screw Co. to lay a pipe to carry away condensation from its engines to the River Thames, under the G.T.R. tracks and lands at Ingersoll, Ont.

4153-4154. Dec. 21—Authorizing the Dunsford Telephone, Light and Power Association to place wires across G.T.R. tracks in Verulam tp., Ont.

4155-4156. Dec. 20—Authorizing Bell Telephone Co. to place its wires across C.P.R. tracks south of Calgary Jct., Alta.

4157. Dec. 21—Submitting for sanction of Governor-in-Council the N.Y.C. & H.R.R. Co.'s operating department rules, in so far as they relate to the St. Lawrence and Adirondack Ry. Co., pending the adoption by the Board of the proposed uniform code of rules.

4158. Dec. 21—Submitting for the sanction of the Governor-in-Council the Algoma Central and Hudson Bay Ry. Co.'s by-laws except sub-sections 2 and 3 of article 2, and by-laws B and C.

4159. Dec. 24—Submitting for the sanction of the Governor-in-Council the Manitoulin and North Shore Ry. Co.'s by-laws except sub-sections 2 and 3 of article 2, and by-laws A, B and C.

4160. Nov. 20—Amending order 3566, authorizing the B.S. & H.B. Ry. to construct and operate its branch line, and to connect its track with the C.P.R. track between 18th and 26th streets, Brandon, Man., by adding thereto: "That the applicant company bear and pay the whole cost of constructing, maintaining, and operating, the said connection, and any appliances that the Board may hereafter require to be installed in connection therewith."

4161. Dec. 10—Authorizing the C.W. & L.E. Ry. to place its power wires across the C.P.R. track at the intersection with Raleigh and William sts., Chatham, Ont.

4162. Dec. 19—Approving live stock contract forms of Nelson and Fort Shepherd Ry., V.V. & E. Ry. Co., and Red Mountain Ry. Co., subject to certain conditions.

4163, 4164. Dec. 6—Authorizing Deputy Chief Commissioner to examine upon oath any witness who may be produced before him to give evidence re the petition of J. M. Leblanc, A. Young, and others in Bonaventure county, Que., for the approval and sanction of the location of the A.Q. & W. Ry. station, in Port Daniel Centre, Que., and re the A.W. & Q. Ry. application for approval of its line of railway at Port Daniel, Que.

4165. Dec. 26—Approving plan, profile, and book of reference of the N., St. Cath. & T. Ry. location in Brantford, Ont., mileage 56¼ to 58 82-100.

4166. Dec. 26—Authorizing Princeton & Drumbo Telephone Co. to place its wires across G.T.R. tracks at Princeton, Ont.

4167. Dec. 26—Authorizing Dunnville Con. Telephone Co. to place its wires across G.T.R. tracks at Moulton station, Ont.

4168. Dec. 24—Authorizing Canada Car Co. to place a telpherage system, operated by electric power, across G.T.R. Co.'s Lachine Canal branch and spur therefrom, to the Electric Fireproofing Co.'s premises.

4169. Dec. 24—Amending order 3231, June 27, 1907, re T.H. & B. Ry. spur to Canadian Westinghouse Co.'s premises, Hamilton, Ont.

4170. Dec. 16—Extending to Jan. 31, 1908, time within which V.W. & Y. Ry. may use the crossing, at rail level, by its railway, of the B.C. Electric Co.'s track on Park Ave., Vancouver, B.C.

4171. Dec. 27—Authorizing C.P.R. to build a branch line to T. Prefontaine & Co.'s premises, Montreal.

4172. Dec. 28—Authorizing Muskoka Independent Telephone Co. to place wires across G.T.R. track in Stisted tp., Ont.

4173. Dec. 27—Authorizing Walkerton and Lucknow Ry. to construct its railway across public road in Brant tp., Ont.

4174. Dec. 24—Extending to Jan. 31, 1908, time permitting G.T.Pac. Ry. to use its standard freight mileage tariff C.R.C. 1.

4175 Dec. 26—Authorizing C.P.R. to construct a branch line and spurs in Regina, Sask.

The Locomotive and Machine Company of Montreal, Limited

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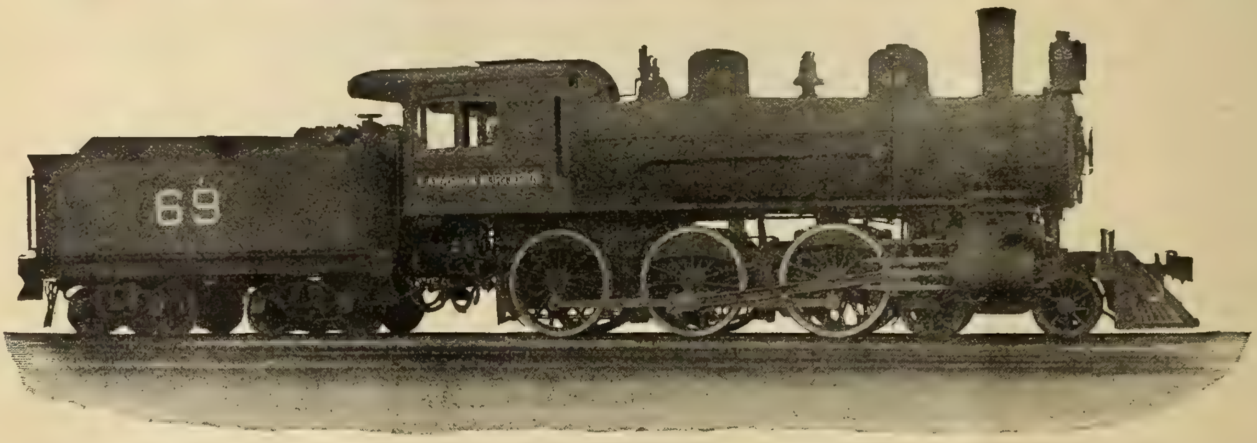

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NEW YORK OFFICE:
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LONDON OFFICE:
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4176. Dec. 24—Exempting Can. Nor. Ry. Co. and Northern Extension Ry. Co. from publishing notice of application for a recommendation to the Governor-in-Council in any newspaper or newspapers other than those published in Winnipeg and Portage la Prairie, Man.

4177. Dec. 28—Authorizing C.P.R. Co. to construct a bridge over highway in Caledon tp., Ont.

4178. Dec. 28—Amending order 4075 authorizing G.T. Pacific Ry. Co. to operate its trains on its line where it crosses the C.P.R. Miniota branch, by striking out the last clause and substituting a clause granting leave to operate the trains over the crossing without being brought to a stop.

4179. Dec. 28—Authorizing G.T. Pacific Ry. to construct a subway carrying a highway under its railway between sec. 12 and 13, tp. 52-53, west of 4th p.m., Alberta.

4180. Dec. 26—Authorizing N. Watson to carry telephone wires across the Pere Marquette Rd., near Wilkie Station, Ont.

4181 and 4182. Dec. 26—Authorizing Bell Telephone Co. to place its wires across the G.T.R., near Canfield Jct., Ont., and at St. Clair Ave., Toronto.

4183 to 4193. Dec. 26—Authorizing Bell Telephone Co. to place its wires across Q.M. & S. Ry., Orford Mountain Ry., and Can. Nor. Ry., at various points.

4194. Dec. 21—Authorizing Wood Bay Telephone Co. to place its wires over C.P.R. tracks on road allowance between sec. 31 and 32, tp. 3, r. 10, west 1st p.m., Manitoba.

4195. Dec. 24—Approving plan, profile, and book of reference showing location of Fort William Terminal Ry. and Bridge Co.'s line in Fort William, Ont.

4196. Jan. 2—Granting leave to Crow's Nest Southern Ry. to use for construction purposes only, until Mar. 1, 1908, or until the interlocking plant ordered by the Board Sept. 10, 1907, is installed, the crossing of the C.P.R. spur ¾ mile east of Hosmer, B.C.

4197. Dec. 28—Extending time specified in order 4124 of Dec. 10, to Jan. 15, 1908, for the submission to the Board of schedules for the running of C.P.R. and G.T.R. trains, under which reasonable time will be allowed for the transfer of passengers and mails at Brockville, Ont.

4198. Jan. 2—Amending order 4009 of Nov. 12, 1907, to provide that the C.P.R. Co. may operate its trains over the crossing of its track by the G.T.R. in Yarmouth tp., Ont.

4199. Jan. 2—Appointing the Chief Commissioner to examine upon oath any witness who may be produced before him to give evidence in the application of the C.P.R. Co. for approval of location of its proposed new station at St. Boniface, Man.

4200. Dec. 11—Authorizing the village of Weston, Ont., at its own expense, to construct a highway in the line and of the width of Denison Ave., and rescinding order 3969 of Nov. 15, 1907.

4201. Jan. 2—Authorizing Walkerton and Lucknow Ry. Co. to build a spur line to the National Portland Cement Co.'s premises, Durham, Ont.

4202. Jan. 7—Authorizing the C.P.R. Co. to build spurs to F. Karlenzig's premises, Lemburg, Sask.

4203. Jan. 8—Authorizing Essex Terminal Ry. Co. to cross the Lake Erie and Detroit River Ry. at Walkerville, Ont.

4204. Jan. 7—Authorizing C.P.R. Co. to build a spur to the Vernon electric light plant at Vernon, B.C.

4205. Jan. 7—Authorizing the C.P.R. to construct its railway along Beach St. and across Tupper St., Alliston, Ont.

4206. Jan. 7—Approving plan, profile, and book of reference showing proposed deviation from the located line of the North Fork extension of the Kettle River Valley Ry.

4207. Jan. 7—Authorizing C.P.R. Co. to build a bridge on its Swift Current section, Sask., mileage 8.4.

4208. Jan. 7—Authorizing Reliance Coal Mining Co. to construct a tunnel under C.P.R. in sec. 3, tp. 10, r. 16, west of 4th mer., Alberta.

4209. Jan. 7—Authorizing Bell Telephone Co. to place its wires across C.P.R. tracks at Bedford Station, Que.

4210. Jan. 7—Authorizing C.P.R. to construct bridge 73.4 on its Swift Current section, Sask.

4211. Jan. 8—Ordering that an electric bell with flashlight be installed and maintained at the C.P.R. crossing south of Cowansville Station, Que.

4212. Jan. 8—Authorizing the St. John Ry. to construct its track across the New Brunswick Southern Ry. on Union St., St. John, N.B.

4213-4217. Jan. 14—Appointing the Chief Commissioner to examine on oath any witness who may be produced before him to give evidence in the application of the Mt. McKay and Kakabeka Falls Ry. Co. to cross the C.N.R., the C.P.R. and the G.T. Pacific Ry. at various points in Fort William, Ont.

4218. Jan. 10—Authorizing Dereham Telephone Co. to place its wires across M.C.R. tracks at Brownsville, Ont.

4219. Jan. 10—Authorizing C.P.R. to construct its railway across road allowance between Toronto Jct. and Bolton, Ont.

4220. Jan. 10—Authorizing C.P.R. to construct additional tracks across Hadley St., St. Paul, Que., for the purpose of a yard.

4221. Jan. 14—Authorizing W.E. & L. S. R. Ry. Co. to operate its trains on its lines where they cross the M.C.R. at Talbot St., Essex, Ont.

4222. Jan. 10—Approving plan, profile, and book of reference showing change in location of Kettle River Valley Ry. Co.'s line of railway at Niagara, B.C., between stations 404+50 and 442+53.3.

4223. Jan. 14—Authorizing Bell Telephone Co. to place its wires across the Alberta Ry. and Irrigation Co.'s tracks east of Lethbridge, Alta.

4224. Jan. 14—Approving plan and profile showing deviations of sections 1 and 2 of Kettle River Valley Ry. Co.'s railway to the North Fork of Kettle River.

4225, 4226. Jan. 14—Authorizing Tillsonburg, Lake Erie and Pacific Ry. to construct its railway across highways in Zorra tp., Ont

4227. Jan. 9—Authorizing Saskatchewan Department of Public Works to construct a highway across the C.P.R. Manitoba and North-Western branch at Marchwell Station, Saskatchewan.

4228. Jan. 10—Authorizing C.P.R. to construct a branch line to the Canadian Rubber Co.'s premises, Montreal.

4229. Jan. 14—Approving Pacific Express Co.'s by-law authorizing the chief clerk of its Tariff Department to prepare and issue tariffs of tolls to be charged for traffic carried in Canada.

4230. Jan. 14—Authorizing G.T.R. to construct a spur line to the Smart Bag Co.'s premises, Toronto.

4231. Jan. 9—Approving Wabash Rd. local standard passenger tariff C.R.C. 371, providing a maximum rate of 3c. per mile between all stations in Canada.

4232. Jan. 10—Authorizing G.T.R. Co. to construct a spur line to the Chesley Rake and Novelty Co.'s premises, Chesley, Ont.

4233. Jan. 15—Extending to Jan. 31, 1908, the time specified in order 4124, of Dec. 10, authorizing C.P.R. and G.T.R. to submit to the Board schedules for the running of trains, under which reasonable time will be allowed for transfer of passengers and mails at Brockville, Ont.

4234. Jan. 16—Authorizing Norfolk County Telephone Co. to place its wires across G.T.R. tracks at Hawtrey station, and Delhi, Ont.

4235, 4236. Jan. 16—Authorizing Ingersoll Telephone Co. to place its wires across G.T.R. and C.P.R. tracks at Beachville, Ont.

4237. Jan. 15—Authorizing Norfolk County Telephone Co. to place its wires across M.C.R. tracks at Townsend Centre and Hawtrey, Ont.

4238. Jan. 15—Authorizing A. E. Lewarton to place a telephone wire across C.P.R. track at Churchbridge, Sask.

4239. Jan. 15—Authorizing the C.P.R. Co. to reconstruct bridge 53.7 on its Woodstock section over the St. John River, N.B.

4240. Jan. 15—Authorizing C.P.R. Co. to reconstruct bridge 44.8 on its Montreal terminals.

4241. Jan. 15—Authorizing C.P.R. to reconstruct bridge 96.2 on its Sherbrooke section, Que.

4242. Jan. 15—Authorizing C.P.R. to reconstruct bridge 9.6 on its Swift Current section, Alberta.

4243. Jan. 15—Authorizing Jewell Lumber Co. to place a telephone wire under C.P.R. tracks near Jaffray, B.C.

4244. Jan. 15—Authorizing C.P.R. to construct and operate a spur line to the Town of St. Stephen's premises, Maxwell, N.B.

4245. Jan. 15—Authorizing Bell Telephone Co. to place its wires across the G.T.R. tracks in Berlin, Ont.

4246. Jan. 7—Authorizing G.T.R. to construct a branch line to the Elmira Interior Woodwork Co.'s premises, Elmira, Ont.

4247, 4248. Jan. 16—Authorizing Toronto and Niagara Power Co. to erect wires for the transmission of electric power across the G.T.R. track between Niagara Falls and Thorold, and north of Lundy's Lane, Ont.

4249 to 4252. Jan. 16—Authorizing Bell Telephone Co. to erect wires across C.P.R. tracks at various points in the Province of Quebec.

4253. Jan. 16—Authorizing Midland Ry. of Manitoba to operate its trains across C.P.R. track at Morden, Man.

◆

The Hosmer Mines, Ltd., has been incorporated under the Dominion Companies Act, with a capital of $500,000 and offices at Montreal, to engage in the mining, milling, refining, etc., of various mineral and metallic substances; to construct, maintain and operate tramways, waterways, telegraph and telephone lines, etc. The provisional directors are: D. McNicoll, W. R. Baker, A. D. MacTier, E. Alexander, and E. W. Beaty, all of the C.P.R., Montreal.

The Capital Construction Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $95,000 and offices at Ottawa, to carry on the business of contractors, and in connection therewith to construct, purchase or otherwise acquire, and to operate, all such transportation facilities by land or water, as may be deemed convenient or necessary. The provisional directors are: W. N. Cornell, J. K. Phillips, Massena, N.Y.; W. C. Perkins, J. G. Gibson and H. H. Williams, Ottawa.

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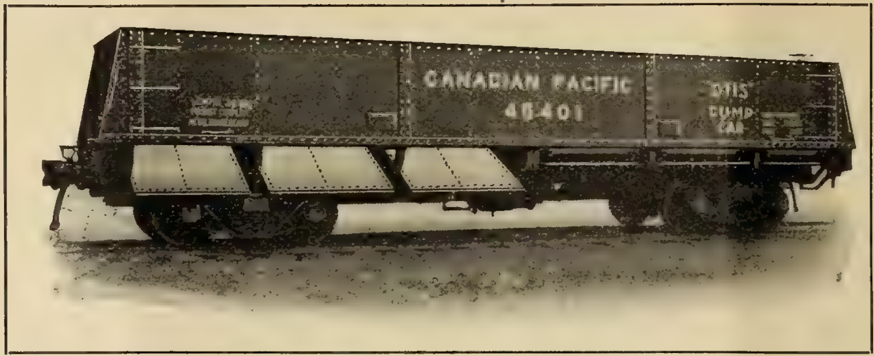

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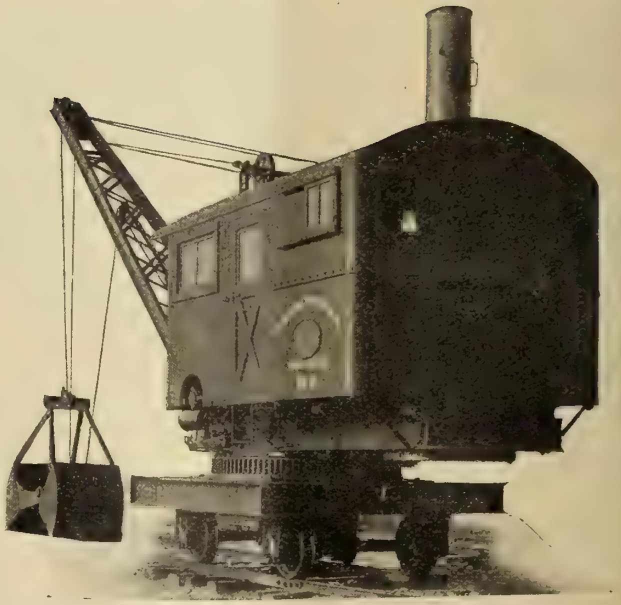

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CANADIAN REPRESENTATIVES

Successors late Jas. Cooper

Montreal

G.T.R. Pension Fund.

At the last semi-annual meeting of the G.T.R. shareholders $200,000 was appropriated as a nucleus of a pension fund for the officials and employes, and it was announced that in addition to the income from this sum, it will be necessary for the company each year to supplement it by an appropriation, now estimated at from $70,000 to $75,000 per annum.

The operation of the fund became effective on and after Jan. 1, 1908, when the rules were published to all the 35,000 or more employes on the rolls. The rules will apply from the highest to the lowest of the staff in Canada, from the General Manager himself down to the section-men and gatekeepers. They require absolutely the retirement from active service of every officer or employe when attaining the age of 65, and if he has entered the service before the age of 50, and has served for 15 years, or more, he is entitled with the approval of the Pension Fund Committee to an annuity of 1% of the average annual salary paid for 10 continuous years, for each year of uninterrupted employment, the basis of calculation being the same as that practically universal on this continent. Thus, if a man has served say 30 years, receiving an average of $1,000 a year on the pay rolls for the last 10 years—or for any period of 10 years during his term of service—he would be entitled to 1% of $1,000, equal to $10 by 30 years, or $300 a year. The company, however, have made a provision that irrespective of rate of pay or service, the minimum allowance to be paid under any circumstances will be $200 a year, and this without any counterbalancing maximum. The allowance from this fund will be on the highest average rate of wages for any 10 consecutive years' continuous service. Any employe over 50 years of age, after 15 years of service if discharged without cause, at any time previous to reaching the pension age limit, becomes eligible to pension in proportion to the number of years of service up to date of discharge. Although it was originally considered desirable to follow the general rules prevailing in Great Britain, of the formation of such fund by mutual contribution from the company and employes, it has been finally decided to follow the practice of companies generally on this continent, of contributing entirely out of their own revenues the necessary funds for the pensioning of their aged and faithful employes.

The Pension Department will be administered by a Pension Committee selected by the company from among its official staff (themselves possible beneficiaries), whose decisions will be final in all matters pertaining to the administration of the fund. The benefits of the fund will also apply to worthy employes who may have been injured in the company's service, or who have suffered the loss of faculties which render them incapable of self-support, such employes having served the company the minimum period of 15 years—whether the age limit has been attained or not.

While the G.T.R. established, a number of years ago, what is known as the Superannuation and Provident Fund Association, which is still in existence, its membership is limited to the official and clerical staff throughout its lines in Canada only, whereas the new fund will apply to employes on all tines of the present system, and to all classes of employes. The Superannuation Fund will continue in operation with the registered membership as of Dec. 31, 1907, but will be closed against the admission of any new members after that date. It is anticipated that the pension scheme will form an admirable adjunct to the company's Insurance and Provident Society, which has been so many years in operation; the weak point in which has always been the inability of an aged or permanently disabled employe to keep up his payments to the insurance fund, although privileged to do so. Hereafter a very small deduction from his pension allowance will enable an employe to make provision for his family up to a maximum amount of $2,000

The pension committee nominated by the directors has elected C. M. Hays, Chairman; W. Wainwright, Vice-Chairman, and H. B. Moore, Secretary.

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Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309.900	116,100+
Nov..	957,400	689,100	268,300	215.700+
	$4,506,800	$3,141,100	$1,365,700	$1,126,900+

Approximate earnings for Dec., $801,100, against $536,200 for Dec., 1906.

Mileage operated at Dec. 31, 2,874 miles, against 2,554 miles at Dec. 31, 1906.

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C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7.010,177.40	4,439,902.25	2,570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
	$34,466,919.69	$22,113,086.68	$12,353,833.01	$ 33,560.65+

Approximate earnings for Dec., $6,355,000, against $5,931,000 for Dec., 1906.

◆

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for Nov., $258,785.81; net earnings, $61,339.25; against $249,728.13 gross and $73,322.11 net, for Nov., 1906. Net earnings for five months ended Nov. 30, $415.544.99, against $497,785.81 for same period 1906. Approximate earnings for Dec., $225,142, against $251,276 for Dec., 1906.

MINERAL RANGE RY.—Gross earnings for Nov., $68,873.15; net earnings, $15,423.22, against $67,072.81 gross and $22,235.64 net for Nov., 1906. Net earnings for five months ended Nov. 30, $76,665.27, against $107,620.14 for same period 1906. Approximate earnings for Dec., $61,993, against $64,967 for Dec., 1906.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for Nov., $1,106,255.89; net earnings, $428,616.09; against $1 099,866.54 gross and $514,414.86 net, for Nov., 1906. Net earnings for five months ended Nov. 30, $2,316,386 36, against $3,024.573.64 for same period 1906. Approximate earnings for Dec., $896,480, against $862,081 for Dec., 1906

◆

Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G.T.R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for Nov., as compared with Nov., 1906:

GRAND TRUNK RAILWAY.

	1907	1906
Earnings	$3.056,400	$2.816,000
Expenses	2,224,400	2,097,990
Net earnings	$ 832 000	$ 718,010

CANADA ATLANTIC RAILWAY.

Earnings	$ 202,400	$ 191,878
Expenses	189,100	179,729
Net earnings	$ 13,300	$ 12,149

GRAND TRUNK WESTERN RAILWAY.

Earnings	$ 528.400	$ 511,350
Expenses	438,100	402,749
Net earnings	$ 90,300	$ 108,601

DETROIT, GRAND HAVEN & MILWAUKEE RY.

Earnings	$ 147,400	$ 142,334
Expenses	121,200	106,566
Net earnings	$ 26,200	$ 36,768

Approximate earnings for Dec., $3,659.296, against $3,691,371 for Dec., 1906.

Railway Interests in Parliament.

The House of Commons at present has under consideration a number of bills having for their object the amending of the general Railway Act, and the Government Railways Act, respecting the operation of the lines, and their liabilities to the shippers and the public. Some of these have been before Parliament for several years past, but have either been defeated or dropped at a late period in the session, owing to closing up of the business, when contested or unpressing private measures are sacrificed.

SPEED OF RAILWAYS IN CITIES.

Mr. Lancaster reintroduced his bill which was dropped in 1907, having for its object the regulation of the speed of railways in cities. This bill proposes to substitute a new section for the present sec. 275 of the Railway Act, cap. 37, Revised Statutes of Canada, providing that no train shall pass over any highway crossing at rail level, in any thickly populated portion of any city, town or village, at a greater speed than 10 miles an hour, unless such crossing is properly protected, or unless such crossing is constructed and thereafter duly maintained in accordance with the orders, regulations and directions of the Railway Committee of the Privy Council, and of the Board in force with respect thereto. Power is also given to the Board to limit such speed in any case to any rate it may deem expedient. It is also provided that the railway shall have to Jan. 1, 1909, to comply with the provisions of the section. The provision at present limits the speed to 10 miles an hour "unless the track is fenced or properly protected in the manner prescribed by this act, or unless permission is given by some regulation or order of the Board," and contains a clause authorizing the Board to limit the speed to any rate which it deems expedient. The House of Commons recently passed the Bill, without amendment.

TIME FOR CONSTRUCTION.

Mr. Turriff has introduced a bill for the purpose of repealing the existing sec. 150 of the Railway Act, and substituting other words making more stringent the law regulating the time for the commencement and completion of authorized railways. The section as proposed reads: "If the railway is not commenced and at least 10% thereof constructed and put in operation within two years after the passing of the act authorizing the construction of the railway, or if an additional 10% thereof is not constructed and put into operation in each of the third and fourth years after the passing of that Act, or if the railway is not finished and put into operation within five years from the passing of that Act, then the powers granted by that Act or this Act shall be null and void as respects so much of the railway as then remains uncompleted. The present section provides for the voiding of the charter in respect of uncompleted portions of the railway if 15% of the capital stock is not expended within two years, or if the railway is not completed within five years after the passing of the Act of incorporation.

PROVISION OF CARS, ETC.

W. F. Maclean has obtained the first reading of a bill to add a new section (317a) to the Railway Act. The section proposes to compel railway companies to provide cars for freight within 96 hours after application therefor, under a penalty of $1 a car per day, to be paid to the shipper; the shipper is to load promptly, a penalty of $1 a day for delay after 48 hours, except for coal, the full time for which shall be 72 hours; loaded cars are to be despatched promptly after loading, under a penalty of $1 a car per day; the company is to give notice of the arrival of

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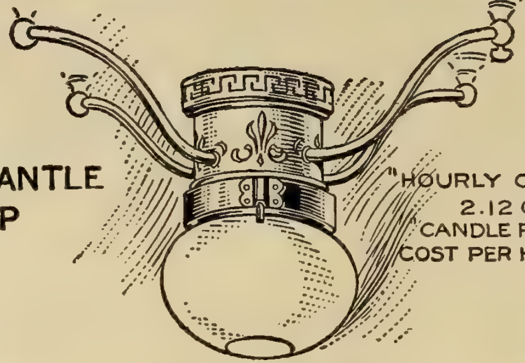
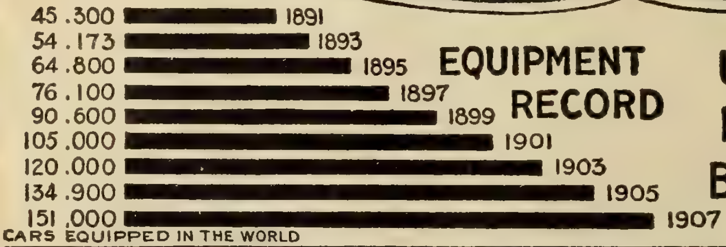


"HOURLY CONSUMPTION 2.12 CUBIC FEET"
"CANDLE POWER 99.5"
COST PER HOUR, ONE CENT.



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WE ARE BUILDING THE RAILWAY SHOPS
For Intercolonial Ry. entirely in
REINFORCED CONCRETE

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E. A. WALLBERG, Pres't Merchants' Bank Building, MONTREAL

freight at its destination, the consignees are to give notice as to the placing of cars, and penalties for default are to be enforced at the rate of $1 a day per car; the consignee is to unload within 48 hours, or in 72 hours in the case of coal, coke or lime in bulk, and boards, deals and scantlings, under a penalty of $1 a day per car, provided if the railway company removes the car after it has been placed for unloading, or obstructs the unloading, the consignee shall not be liable for the delay so occasioned. In cases where a shipper has made application for cars on several days which are all filled on the same day, the shipper shall be allowed certain delays. In the computation of time, Sundays and holidays are not to be included; the penalties may be recovered in any court of competent jurisdiction; the shipper's rights to recover actual damage are not to be affected by the Act; the period during which the movement of freight is suspended on account of unavoidable accident or by the act of Providence, shall be added to the free time allowed by the section.

PASSENGER RATES, ETC.

W. F. Maclean has also secured the second reading of a bill providing for the addition of sleeping car companies and telegraph companies to those coming within the jurisdiction of the Board of Railway Commissioners; the addition of a sub-section to sec. 331, providing that the tolls of any standard passenger tariff shall not exceed 2c. a mile, and adding a new section (332a) to provide that "notwithstanding anything herein, or in any special act, the company may not (a) charge or receive a higher rate or toll per mile for the carriage of passengers in Canada than the maximum rate or toll per mile that it is permitted by law to charge for the carriage of passengers in any foreign country, state, or part thereof in which it operates a railway; (b) charge or receive a higher rate or toll per mile for passenger traffic beginning or endng in Canada, than it charges or receives for passenger traffic in Canada which originates n, or is destined for, a foreign country." It is also asked to amend sec. 358, which authorizes the Board of Railway Commissioners o order telephone companies to make connection with municipal telephone systems, by striking out the words "long distance" wherever they occur.

DAMAGES BY FIRE.

Mr. Kennedy seeks by a bill, which has been read a first time, to amend sec. 298, which provides the compensation to be paid by railway companies for damage by fire occasioned by sparks from locomotives, by striking out the words, "to crops, lands, ences, plantations or buildings and their contents," so that the section would read: "Wherever damage is caused by a fire started by a railway locomotive," etc.

DAMAGES ON GOVERNMENT LINES.

Mr. Macdonald's bill, which proposes to amend sec. 29 and 61 of the Government Railways Act, has been read a first time. Sec. 29, at present in force, it is asked shall be repealed, and a new section substituted, providing that where animals are killed on the railway, the owner shall be entitled to recover damages except it is established in court that there was neglect on the part of the owner or agent, but the fact that the animal was not in charge of a competent person at the time of the accident shall not deprive the owner of his right to recover. The 61st sec. of the Act it is also proposed to repeal, and to substitute therefor another, providing that cleared land adjoining the railway shall be maintained free from dead and dry grass, weeds, thistles, and other unnecessary combustible material. The liability of the crown for damages to crops, lands, fences, plantations or buildings and their contents caused by a fire started by a railway locomotive working on the railway is to exist whether the officers or servants of the railway have been guilty of negligence or not, provided it is shown that modern and efficient appliances have been used and that there has been no neglect; the total amount of the compensation to be recovered shall not exceed $5,000, and the amount recovered is to be apportioned among the parties suffering loss as the court or judge determines.

◆

The C.P.R. has made a special low rate from Fort William, Ont., to Liverpool, Eng., for damaged grain, and is making special efforts to get as much as possible out of the country before the frost breaks up. Large quantities of the frozen wheat are being exported to Europe for use as feed.

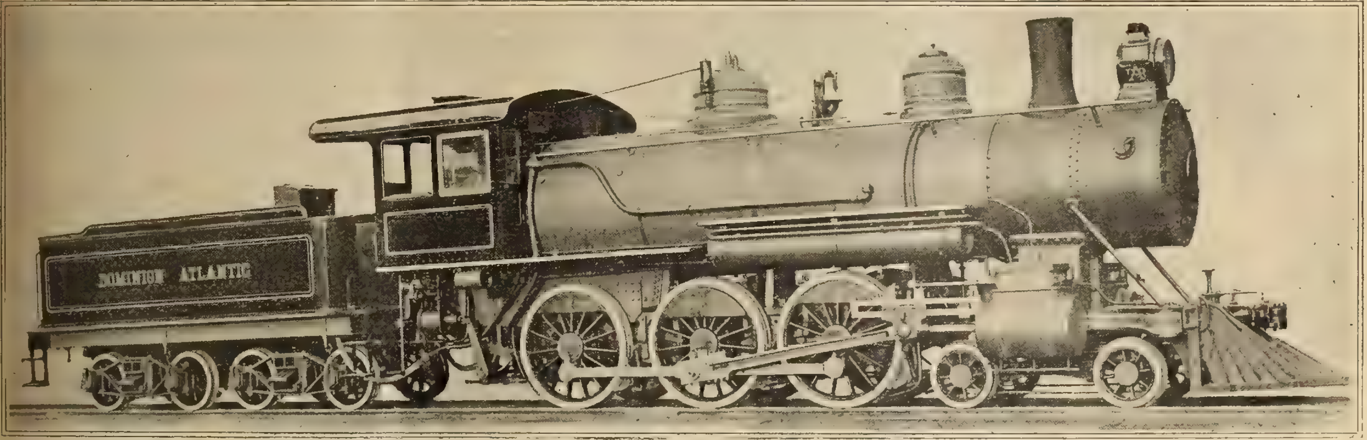
The Lieutenant-Governor at the opening of the British Columbia Legislature, Jan. 17, in referring to future legislation, said a proposal would be submitted for consideration for the exemption of certain railways from taxation for 10 years from completion. This measure would apply to railways already authorized to be constructed.

The appeal of the Quebec Improvement Co., Ltd., in its case against the Quebec Bridge and Railway Co., was dismissed, Jan. 24, by the Judicial Committee of the Privy Council. The litigation, which commenced in 1905, was to determine the question of right-of-way near the bridge approaches, and judgment was originally given in favor of the Improvement Co This judgment was reversed by the Dominion Court of Appeal, which latter judgment is now upheld.

Dominion Atlantic Ry. Locomotives.

The Dominion Atlantic Ry. has received recently two 10-wheeled locomotives built by the Baldwin Locomotive Works, Philadelphia, Pa. These engines can exert a tractive force of 22,100 lbs., and they will be employed in freight service. The general arrangement of the design is shown in accompanying illustration. While no unusual features enter into the construction of these locomotives they are interesting as representing a type which, for many years, has been doing excellent work in both freight and passenger service. With driving-wheels 60 ins. in diameter they are capable of making good speed, and although their weight, including the tender, is approximately only 100 tons, they are suitable for a wide range of service. The cylinders are single expansion, equipped with balanced slide valves, which are actuated by link motion. The eccentric rods are straight, and the link blocks are connected to the rock shafts by transmission bars, which pass under the leading driving axle. The guides are of the two bar type, while the crossheads are of cast steel of the Laird design, fitted with brass shoes. The driving-wheel centres are also of cast steel, and the engine frames are of the same material, with single front rails of wrought iron. The driving-boxes are of steeled cast iron. The engine truck is equipped with a swing bolster, and the wheels are steel tired with cast steel centres. The boiler is of the wagon top type, with three rings in the barrel, the middle ring being tapered. According to the specification, all holes in the boiler plates are drilled. The design is suitable for 200 lbs. pressure, while the safety valves are set at 180 lbs. The circumferential seams are double-riveted, and the horizontal seams are butt-jointed and sextuple-riveted. The front end is of the self-cleaning type, with a cast iron taper stack 16 ins. in diameter at the choke. Copper steam pipes are used in the smoke box. The tender is of the eight-wheeled type, with U shaped tank having a sloping floor in the fuel space. The frame is built of steel channels. The trucks are of the arch bar type, equipped with cast steel bolsters and steel-tired wheels having cast steel spoke centres. The threads on all the bolts used in these locomotives are made to the Whitworth standard. Following are the general dimensions:

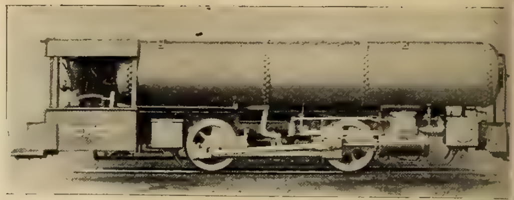
Cylinder	19 ins. x 24 ins.
Valve	Balanced.
BOILER.—Type	Wagon top.
" Material	Steel.
" Diameter	60 ins.
" Thickness of sheets	9/16 in. and 5/8 in.
" Working pressure	180 lbs.
" Fuel	Coal.



DOMINION ATLANTIC RY. TEN-WHEEL LOCOMOTIVE BUILT BY THE BALDWIN LOCOMOTIVE WORKS.

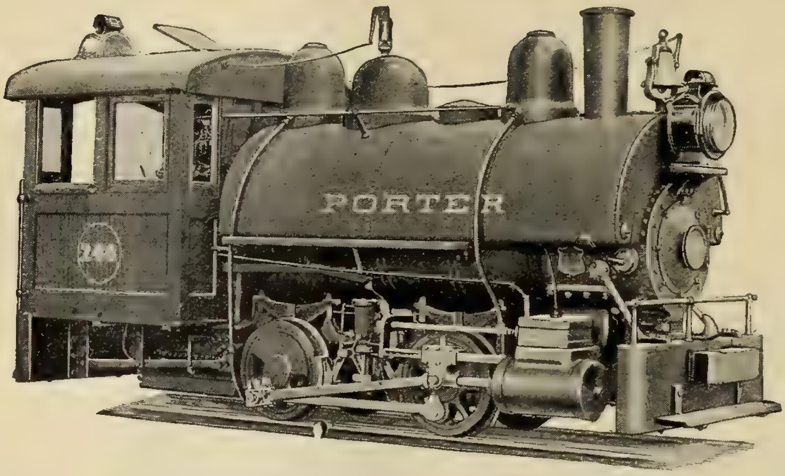
LIGHT
LOCOMOTIVES

STEAM AND COMPRESSED AIR



COMPRESSED AIR LOCOMOTIVE

H. K. PORTER COMPANY
643 Wood Street, - Pittsburg, Penna.



LATEST DESIGN CONTRACTORS' LOCOMOTIVE

ALL GAUGES. EVERY VARIET
OF DESIGN. FOR ALL PURPOSE

CONTRACTORS' LOCOMOTIV
ON HAND AND UNDER WAY FO
QUICK COMPLETION. WIDE AN
NARROW GAUGE.

LOGGING, MINE AND INDU
TRIAL LOCOMOTIVES.

CANADA CAR COMPAN
MONTREAL, QUE. LIMIT D

MANUFACTURERS OF
RAILWAY FREIGHT AND PASSENGER CAR
OF ALL DESCRIPTIONS

CAR WHEELS—CASTINGS—FORGINGS
AND ALL NECESSARY EQUIPMENT FOR
CAR CONSTRUCTION

Cars Built to Standard Designs or to Customers' Specifications

P.O. ADDRESS
BOX 2286, MONTREAL.

Works: TURCOT

ER—Staying	Radial.
-BOX—Material	Steel.
" Length	96 ins.
" Width	42 ins.
" Depth, front	59⅛ ins.
" " back	56⅛ ins.
" Thickness of sheets, sides	⅜ in.
" " " back	⅜ in.
" " " crown	½ in.
" " " tube	½ in.
ER SPACE.—Front	4 ins.
" " Sides	3 ins.
" " Back	3 ins.
ES.—Material	Steel.
" Wire gauge	No. 12.
" Number	256.
" Diameter	2 ins.
" Length	13 ft. 3 ins.
TING SURFACE.—Fire-box	132 sq. ft.
" " Tubes	1,766 sq. ft.
" " Firebrick tubes	—— sq. ft.
" " Total	1,898 sq. ft.
" " Grate area	28 sq. ft.
VING WHEELS.—Diameter, outside	60 ins.
" " centre	54 ins.
" " Journals	8 ins. x 8½ ins.
INE TRUCK WHEELS.—Diameter	28 ins.
" " " Journals	5 ins. x 7½ ins.
EL BASE.—Driving	11 ft. 6 ins.
" " Rigid	11 ft. 6 ins.
" " Total engine	22 ft. 0 ins.
" " Total engine and tender	48 ft. 1 in.
GHT.—On driving wheels	105,650 lbs.
" On truck	22,650 lbs.
" Total engine	128,300 lbs.
" Total engine and tender, about	205,000 lbs.
DER.—Wheels, number	8.
" " diameter	33 ins.
" Journals	4¼ ins. x 8 ins.
" Tank capacity	3,800 gals.
" Fuel capacity	7 tons.
" Service	Freight.

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The Death Roll of 1907.

an. 7. W. Smith, formerly Superintend- Bridges, Esquimalt and Nanaimo Ry., dboro Bay, B.C.

an. 10. Andrew Thompson, President bec Ry., Light and Power Co., Quebec.

an. 11. Hon. C. C. Colby, director sawippi Valley Ry. and Waterloo and og Ry., at Montreal.

an. 16. Senator F. J. Hayden, Fort yne, Ind., Secretary of the old Cobourg, rboro and Marmora Ry.

an. 23. D. MacArthur, Winnipeg, pro- er Manitoba and Northwestern Ry.

an. 25. Hon. A. G. Blair, formerly ister of Railways and Canals, and chair- Board of Railway Commissioners.

n. –. C. F. Livermore, formerly Treasurer higan Central Rd., aged 77.

n. –. Geo. Banker, formerly General senger Agent and General Accountant York Central and Hudson River Rd., 80.

eb. 2. J. M. Robinson, until 1905 Vice- ident St. John Ry., St. John, N.B.

eb. 2. John Trutch, C.E., on the engin- ng staff of the Onderdonk Construction on C.P.R. construction, Yale, B.C. at Richmond, Surrey, Eng.

eb. 4. G. J. Grammer, Vice-President York Central and Hudson River Rd., Traffic Manager Lines West of Buffalo, hicago, Ill.

eb. 16. M. E. Evans, New York, President e Breton Ry., killed in a railway accident New York Central Rd. at White Plains,

eb. 27. Thos. Foley, railway contractor, ative of Lanark county, Ont. Founder e firm of Foley Bros. & Larson, St. Paul, n.

eb. 28.—J. H. Joseph, Montreal, aged 92. ancier, and director of railway, elevator telegraph companies.

eb. —. G. Renton, travelling engineer .R., London, Ont. Killed in a collision e.

eb. —. W. B. Leather, C.E., St. Cath- es, Ont., aged 86. Was engaged on rcolonial Ry., G.T.R., and Atcheson, eka and Santa Fe Rd., retiring in 1896.

ar. 1. J. D. Maclennan, C.E., Cleveland, ., was engaged on engineering staff of .R. during construction.

ar. 2. C. C. Robinson, Toronto. Solici- Ontario Railway and Municipal Board.

Mar. 6. A. G. Peden, Ottawa. Until 1900 Auditor Canada Atlantic Ry.

Mar. 20. H. T. Jaeger, General Eastern Agent, Passenger Department, Erie Rd., Buffalo, N.Y.

Mar. 24. C. P. Sclater, Secretary-Treasurer Bell Telephone Co., Montreal.

Mar. 27. J. C. Robertson, Sharon, Mass., director Rhodes, Curry & Co., Amherst, N.S., and formerly Manager of Harris Car Works, St. John, N.B.

Mar. —. J. N. McIlhargy, Port Arthur, Ont., Canadian Northern Ry. service, and previously Trainmaster Toronto, Hamilton and Buffalo Ry., Hamilton, Ont.

April 5. F. H. Small, Bangor, Me. Formerly Travelling Passenger Agent C.P.R., Montreal.

April 6. W. Thomson, Toronto, aged 76. Sometime President of the old Northern Ry.

April 11.—J. D. Sullivan, Superintendent Halifax and South-Western Ry., Bridgewater, N.S.

April 17. S. S. McCrea, formerly G.T.R. freight agent, Buffalo, N.Y.

April 25. E. G. Russell, Prince Rupert, B.C. In G.T. Pacific Ry. service, and formerly Manager Intercolonial Ry.

April 30. S. J. Selig, auditing staff Intercolonial Ry., Moncton, N.B.

April —. D. Wilcox, formerly President Delaware and Hudson Co., New York.

May 5.—F. C. Daniels, Schrieber, Ont., C.P.R. Locomotive Inspector. Accident.

May 20. G. T. Marks, Port Arthur, Ont., at Toronto. A promoter of the Port Arthur, Duluth and Western Ry., and the Ontario and Rainy River Ry.; and steamship owner.

May 23. J. T. Barnes, Brandon, Man., Assistant Chief Train Dispatcher C.P.R.

May —. J. Hartnedy, Edmonton, Alta., Assistant Superintendent Canadian Northern Ry. Sleeping and Dining Cars.

May —. F. C. Bodwell, Victoria, B.C., G.T. Pacific Ry. engineering staff, B.C. section.

June 6. A. W. Mackenzie, Toronto, Treasurer Canadian Northern Ry., and allied companies; Secretary-Treasurer Inverness Ry. and Coal Co.

June 12. John Waldie, Toronto, President Victoria Lumber Co., and steamship owner.

June 22.—R. J. Gould, London, Ont., G.T.R. yardmaster. Accident in yard.

June 23. John Hunter, Huntingdon, Que. A promoter Montreal and Champlain Junction Ry

July 4. F. M. Hamel, City Engineer, Hull, Que. Formerly on engineering staff Intercolonial Ry.

July 6. Jas MacBeth, Master Car Builder, New York Central and Hudson River Rd., Buffalo, N.Y. Formerly in old Great Western Ry. service, Hamilton, Ont.

July 10. H. R. MacCormick, Letellier, Man. C.P.R. station agent. Accidentally drowned.

July 24. D. G. Ross, Vernon, B.C., formerly Superintendent C.P.R., Fort William, Ont., and Nelson, B.C.

July 29. D. M. Fraser, Windsor, Ont., Travelling Passenger Agent C.P.R.

July 29. J. B. McDonald, Allandale, Ont., night foreman, G.T.R. Accident.

July —. C. N. Travons, General Solicitor Wabash Rd., aged 50.

Aug. 16. John Little, Annandale, Scotland, formerly in charge of Land Department old Great Western Ry., Hamilton, Ont.

Aug. 28. Capt. D. J. Kennelly, Sydney, N.S., formerly Manager old Sydney and Louisburg Coal and Ry. Co.

Aug. 29. A. H. Berks, engineer in charge of construction for contractors Quebec Bridge. Drowned in collapse of bridge.

Sept. 1. G. T. Davie, Quebec, shipbuilder and steamship owner.

Sept. 5. J. Scriver, Hemmingford, Que., aged 82 formerly President of local railway companies now merged in G.T.R.

Sept. 5. J. Law, London, Ont., formerly Track Superintendent G.T.R.

Sept. 10. W. H. Heskett, Winnipeg, Man., Assistant Storekeeper C.P.R.

Sept. 15. W. C. Hall, Quebec, formerly Superintendent C.P.R., Quebec.

Sept. —. W. F. Bigger, Grand Haven, Mich., was Superintendent Welland Canal, Ont., and subsequently on the engineering staff Michigan Central Rd.

Oct. 2. Lieut.-Col. Henshaw, Montreal, President Marconi Wireless Telegraph Co., director Montreal Street Ry., Montreal Park and Island Ry., Suburban Tramway Co., Richelieu and Ontario Navigation Co.

Oct. 8. H. D. P. Brady, Montreal, formerly shipbuilder.

Oct. 11. W. Aldred, Windsor, Ont. Captain G.T.R. car ferry Great Western.

Oct 13. F. Thomas, London, Eng., formerly Government Inspector of construction C.P.R. lines between Ottawa and Quebec.

Oct. 23. R. C. W. McCuaig, Ottawa, measuring surveyor of shipping.

Oct. 30. Jas. Wattie, Valleyfield, Que., formerly President Lake St. Francis Navigation Co., and promoter of St. Lawrence and Adirondack Ry.

Oct. 31. Harvey Graham, New Glasgow, N.S., director and Assistant Manager Nova Scotia Steel and Coal Co.

Oct. —. M. D. Woodford, Kalamazoo, Mich., formerly President Cincinnati, Hamilton and Dayton Rd. From 1872 to 1875 he was Assistant General Superintendent Great Western Ry., Hamilton, Ont.

Oct. —. Jas. Conlon, St. Thomas, Ont., Superintendent Electrical Department Michigan Central Rd., there.

Oct. —. J. O. Labreque, Montreal, Purchasing Agent St. Lawrence Canadian Navigation Co.

Oct. —. M. L. Beaker, Freight Claims Agent Wabash Rd., aged 57.

Nov. 6. C. Fitch-Kemp, London, Eng., President Dominion Atlantic Ry.

Nov. 6. Sir James Hector, Wellington, New Zealand. Discoverer of the Kicking Horse Pass in the Rocky Mountains used by the C.P.R.

Nov. 8. J. Davis, Alton, Ont.; was Chief Engineer Guelph Junction Ry., and was on the engineering staff of Guelph and Goderich Ry

Nov. 28. R. F. Tate, Toronto, Resident Engineer Mackenzie, Mann & Co., aged 52.

Nov. 29. F. W. Meyers, at Minneapolis, Minn., Illinois Central Rd. Passenger Department. During C.P.R. construction he was engaged in accountant's department at Winnipeg.

Nov. —. J. F. Trowbridge, General Manager Northwestern Steamship Co., aged 55.

Dec. 2. G. G. Odell, Ryde, Isle of Wight, England. From 1879 to 1887 in C.P.R. engineering department.

Dec. 7. G. L. Reid, Brighton, Sussex, Eng., formerly Chief Engineer old Great Western Ry. of Canada, aged 79.

Dec. 10. C. E. Lambert, Thrells, N.Y., formerly General Passenger Agent West Shore Rd., aged 61.

Dec. 13. J. H. Morley, Winnipeg, formerly in railway service in Toronto, and subsequently General Passenger Agent Richelieu and Ontario Navigation Co., Montreal.

Dec. —. David Halstead, Calgary, Alta., Travelling Passenger Agent C.P.R.

Dec. —. O. W. Murray, Merrifield, Sask. One of the first of the C.P.R. operating staff at Winnipeg in 1882.

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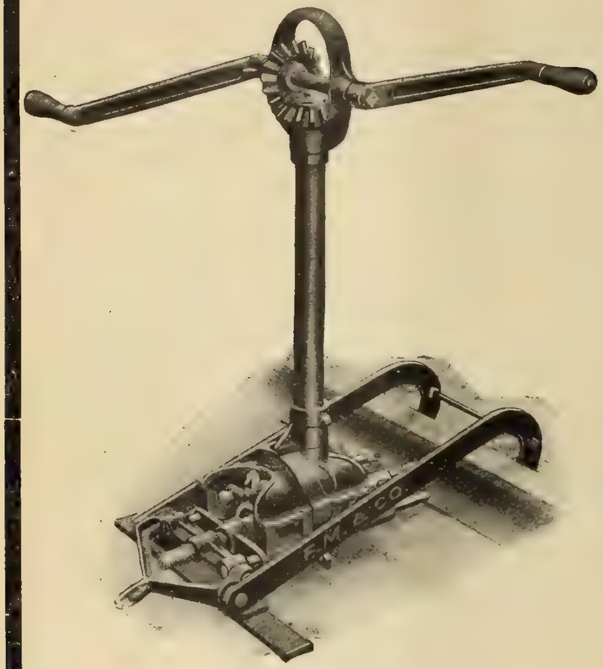
The Montreal Board of Trade has decided to establish a transportation bureau and to engage the services of an expert in freight matters to conduct it.

RAILWAY AND CONTRACTORS' SUPPLIES

TRACK APPLIANCES OF ALL KINDS



Sheffield Rail Drill

CAR MOVERS AND REPLACERS
TRACK GAUGES
TRACK LEVELS
RAIL SAWS
CLAW BARS
and all miscellaneous
TRACK TOOLS

BARRETT JACKS
LOCOMOTIVE JACK SCREWS
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SHEFFIELD
Inspection Motor Cars
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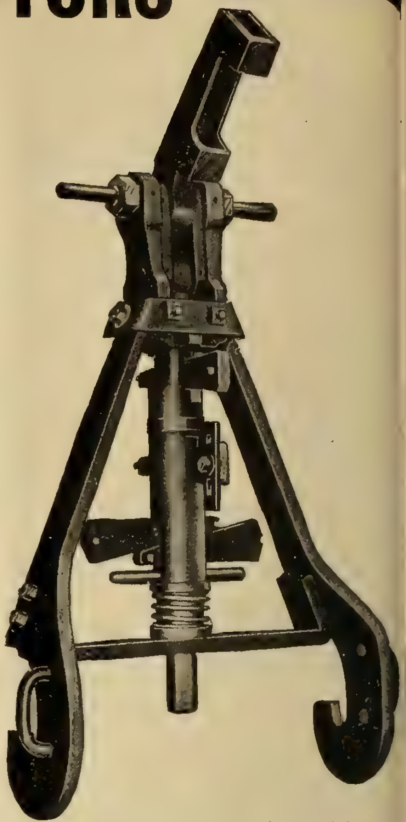
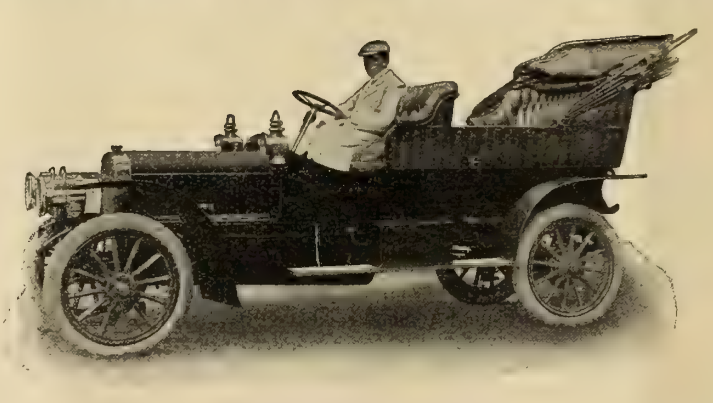


F—M. Automatic Rail Bender and Straightener

THE CANADIAN FAIRBANKS CO., LIMITED
MONTREAL TORONTO WINNIPEG VANCOUVER

THORNYCROFT AUTOMOBILES

HIGH-CLASS CARS ONLY
From 14 to 75 H.P.



45 H.P. Six-Cylinder Car.

Prices Range from $3,500 to $10,000

MOTOR DELIVERY WAGONS, OMNIBUSES LORRIES

SOLE SALES AGENTS FOR CANADA

POLSON IRON WORKS LIMITED, TORONTO

Lake Superior Corporation.

Following are extracts from the report of the directors for the year ended June 30, 1907, presented at the annual meeting recently:

INCOME ACCOUNT.

*Interest and dividends received on securities of subsidiary companies	$ 527,982.79
Interest received and accrued on loans and bank balances, together with sundry rentals	150,029.13
	$ 678,011.92
Less: Interest paid on loans, general expenses, taxes and balances of organization charges, and accounts written off	148,381.52
	$529,630.40
Deduct: Interest on corporation first mortgage bonds	500,000.00
Surplus for period	$29,630.40
Undivided surplus: June 30, 1906	$591,682.62
Surplus for year ended June 30, 1907	29,630.40
	$621,313.02
Less: Paid 5% on income bonds, Oct., 1906	150,000.00
Undivided surplus, June 30, 1907	$471,313.02

*In additon to interest and dividends paid, as stated, the subsidiary companies have reserved $342,000 from net earnings for the year for extensions and working capital.

ASSETS.

Investments and securities of subsidiary companies	$50,937,591.23
Loans to subsidiary companies	1,954,362.57
Loans and accounts secured by bonds, etc	177,000.00
Treasury bonds with accrued interest	1,114,270.83
Suspense and other items	5,135.16
Cash on hand	31,850.24
Cash provided for unpaid coupons (see Contra)	43,150.00
	$54,263,360.03

In addition to the bonds in the treasury, and cash on hand, there is held for the account of the Algoma Central and Hudson Bay Ry. Co., to be used in the extension of its line, cash	$76,336.66
First mortgage bonds of the Lake Superior Corporation	345,000.00

LIABILITIES.

Capital stock	$40,000,000.00
First mortgage 5% bonds	10,000,000.00
Income bonds	3,000,000.00
Accrued interest on bonds and loans	42,865.65
Outstanding coupons due (See Contra)	43,150.00
Bills and accounts payable	662,640.99
Suspense account	43,390.37
Undivided surplus, June 30, 1907	471,313.02
	$54,263,360.03

The general business of the several subsidiary companies has been satisfactory. Most of the plants have been in operation throughout the year.

Algoma Steel Company, Ltd.—The output of this company for the past year has been: pig iron, 129,442 tons; steel ingots, 222,705 tons; blooms, 193,985 tons; standard steel rails, 178,624 tons. The rail production for the year ended June 30, 1907, was 178,624 tons, compared with 98,822 for the year ended June 30, 1905, and 159,740 tons for the year ended June 30, 1906. The unfilled contracts for the supply of rails on June 30, 1907, amounted to 74,378 tons, as compared with 35,013 on June 30, 1905, and 89,330 on June 30, 1906. The demand for rails continues good, and the construction of several transcontinental railways assures that the rail mill will be continuously employed. The Dominion Government in Nov., 1906, passed an act extending the period within which bounties will be paid on pig iron and steel ingots manufactured in Canada, and the Algoma Steel Co. will be entitled to the benefit of the provisions of this act. The payments by the Dominion Government under this act will substantially increase the company's income. The larger of the blast furnaces was overhauled and relined during the year at a considerable expense, and is now in good condition. The output of the blast furnaces is not nearly sufficient to supply the rail mill with pig iron, and the balance required to keep the mill in continuous operation must be purchased in the open market. During the year the extraordinary increase in the price of pig iron, without a corresponding increase in the selling price of rails, has materially reduced the profits of the company. An increase in blast furnace capacity of about 500 tons a day is urgently needed and must be provided if the best results are to be obtained in the company's operation. This will involve a capital expenditure of about $1,000,000. Since June 30, 1907, blast furnace 1 has been enlarged and its capacity increased nearly 100 tons a day, and the directors have decided, so soon as the necessary financial arrangements can be made, to erect an additional blast furnace of sufficient capacity to make the company independent of the outside market. The benefits of the enlargement already made will appear in the earnings for the ensuing year.

The Lake Superior Iron and Steel Co., Ltd., was incorporated during the past year for the purpose of owning and operating the open hearth furnaces referred to in the second annual report. All the issued stock of the company is held by the Lake Superior Corporation. The open hearth furnaces have been completed after a capital expenditure of $284,000. These furnaces are now working satisfactorily, and their product during the ensuing year should very materially add to the income of the corporation.

The Lake Superior Power Co.—Practically all the power at present developed on the Canadian side of the river is required for the operation of the various subsidiary companies of the corporation, and the Power Company has during the year supplied all the companies with power. Much development work has been done on the Helen Mine during the year, as well as working the mine itself. A substantial part of the output of the mine is used in the Steel Co.'s operations. A good market is available for all surplus ore as rapidly as it can be mined at prices profitable to the company. The unfilled contracts for ore on June 30, 1907, amounted to 154,576 tons, as compared with 120,612 on June 30, 1905, and 95,081 on June 30, 1906. Pyrites in quantity continues to be found in the mine, and a steady market for same is being supplied as fast as the pyrites is mined.

Algoma Central and Hudson Bay Ry.—Manitoulin and North Shore Ry., and British-America Express Co.—The freight of the different subsidiary companies continues to be the principal source of revenue of these railways, particularly the Algoma Central and Hudson Bay Ry., constituting 76% thereof. Until these railways are extended so as to make connections with trunk lines, we cannot hope to secure either reasonable or adequate returns on the capital invested. At the last session of the Ontario legislature the land grant to the A.C. & H.B. Ry. of 7,400 acres per mile, for 225 miles, was renewed for two years from Sept. 1, 1907, so as to enable the company to complete construction and thereby earn the land grant. The extension of this railway to connections with the transcontinental railways to the north would open up a very extensive and valuable timber and mineral territory, and not only would the opening up of this territory be of very material advantage to the operating companies, but it should insure a large and profitable passenger and freight business for the railway. The loss of the Theano, one of the company's steamships, with a cargo of 2,000 tons rails (insured), and the delay of the contractors in the reconstruction of the barge Agawa into a steamship, thus laying it up for a part of the navigation season, have diminished the earnings of the fleet for the year.

International Transit Co. and Trans-St. Mary's Traction Co.—The business done and the operating results of the street railways on the Canadian side and on the U.S. side of the St. Mary's River, and the ferry between, show an improvement over the preceding year.

Capital Expenditures.—The necessary expenditures on capital account of the different subsidiary companies for property, extensions and construction have been unusually heavy during the year. Over $450,000 has been expended for these purposes, as follows:

Manitoulin & North Shore Ry. Co	$ 42,025.36
Trans-St. Mary's Traction Co	8,186.90
Tagona Water & Light Co	17,390.18
Sault Ste. Marie Pulp & Paper Co	13,293.43
Lake Superior Power Co	34,507.27
Algoma Commercial Co	7,791.59
Algoma Steel Co	43,006.70
Lake Superior Iron & Steel Co	284,829.88
International Transit Co	469.34
	$451,500.65

In order to secure the best results from the operations of the different plants, further extensions are absolutely necessary. To make partial provision for such extensions and for working capital, the subsidiary companies have set aside, out of their net earnings of the past year, the sum of $342,000.

W. N. Sawyer, General Manager, retired from the employ of the company on Dec. 31, 1906, and the General Auditor, J. S. Wynn, has been acting Manager, pending the appointment of a new general manager. Efforts are being made to secure a general manager in all respects qualified for so important and responsible a position. Under all the circumstances the results of the year's operations have been reasonably satisfactory, but it is to be regretted that the earnings of the corporation have not warranted paying interest on the income bonds. When the extensions contemplated by the subsidiary companies are completed, the directors confidently expect that the earnings of the corporation will justify the resumption and continued payment of the interest on the income bonds.

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Great Northern Ry. Lines in Canada.

The report of the directors for the year ended June 30, 1907, contains a large amount of information relative to construction being carried on in Canada, and upon the branch lines running up to the International Boundary.

Nothing appears to have been done according to the report upon the projected extension of the branch line now terminating at Greenbush, Minn., from that point to Warroad, where a junction would be effected with the Canadian Northern Ry., which runs through Minnesota, round the angle of the Lake of the Woods in that state. An extension of the branch from near York, N.D., was opened Nov. 6, 1906, from Thorne, north-west to Dunseith, near the International Boundary, 7.61 miles, just south of Turtle Mountains. The extension from Berthold north-west to Crosby, 89.09 miles, was expected to be completed by Dec. 1, 1906, but the work has been considerably delayed. On June 30, 1907, there had been laid 55.50 miles of track, and it was expected to have the line completed by Nov. This branch line runs very close to the Minneapolis, St. Paul and Sault Ste. Marie Ry., for about half its distance, and then bears away to the west, terminating at present at Crosby, just south of the International Boundary, near where the Long Creek River runs into Montana from Saskatchewan. The branch was opened from Lignite to Crosby, 34 miles, Dec. 1, the section from Berthold to Lignite having been opened earlier.

The Brandon, Saskatchewan and Hudson's Bay Ry.—From the International

BROWNHOIST LOCOMOTIVE CRANE

FUELING A LOCOMOTIVE TENDER

For which purpose they are in much demand.

They can of course be equipped with hook, and used for making lifts of any material.

Write for details and catalogues.

—THE—

BROWN HOISTING MACHINERY CO.

ENGINEERS AND DESIGNERS OF HOISTING MACHINERY OF ALL DESCRIPTIONS

MAIN OFFICE AND WORKS: CLEVELAND, OHIO. BRANCH OFFICES: NEW YORK & PITTSBURG

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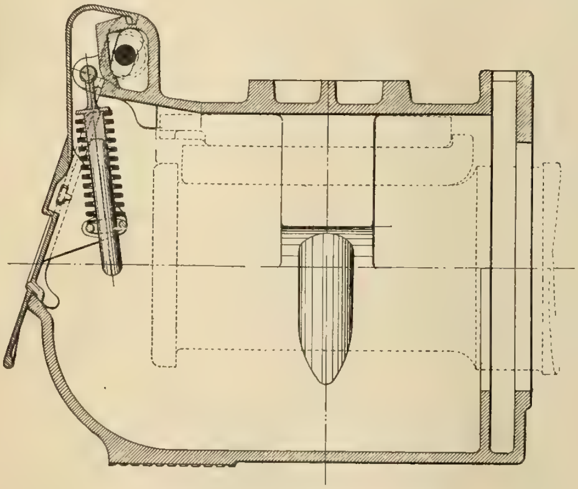

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Boundary north of St. John, N.D., north to Brandon, Man., 69.45 miles, was opened for traffic, April 4.

The Midland Ry. of Manitoba from the International Boundary north of Neche, N.D., north-west to Portage la Prairie, Man., 77.01 miles, was opened for traffic Mar. 11. the line from the International Boundary north of Walhalla, N.D., to Morden, Man., 15.54 miles, is to be opened this fall. The Great Northern Ry. has constructed an extension of its branch from Neche, to connect with the Portage la Prairie line, 0.64 miles, at the International Boundary, and also from Walhalla to connect at the International Boundary with the line to Morden, 5.35 miles.

Crow's Nest Southern Ry.—Work is under way on this railway upon a 24-mile extension from Fernie, B.C., north to the Crow's Nest Pass Coal Co.'s mines at Michel, B.C.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—The construction work of this railway covers the work on the Canadian side, and that of the Washington and Great Northern Ry., the work on the U.S. side of a line to connect Spokane, Wash., and Vancouver, B.C. The line runs from the G.N.R. near Spokane, to Marcus, at which point branches run to Nelson and Rossland, B.C. The W. and G.N.R. runs from Marcus to the International Boundary, then the V.V. and E. R. carries it round Grand Forks, with a branch to Phœnix, B.C.; then comes another dip into the U.S. to Curlew and Republic, and from Curlew back to the boundary, from which point the V.V. and E.R. has completed the line to Midway. The report says: "The V.V and E. R. and the W. and G.N.R. have been opened for operation from Midway, B.C., to the International Boundary near Molson, Wash. (V., V. and E.), 28.89 miles, and from the International Boundary near Molson to Oroville, Wash. (W. and G.N.), 27.82 miles. On the section from Oroville west to the International Boundary at Chopaka, (W. and G.N.), 20.64 miles, and from that place to Keremeos, B.C. (V.V. and E.), 18.20 miles, tracklaying has been finished. The V.V. and E. is also building from the Pacific coast east to meet the line building west from Keremeos. On this section work is under way from Cloverdale, B.C., east to Abbotsford, 26.25 miles. The V.V. and E. and the Victoria Terminal Ferry and Ry. Co. is building a low-grade line from New Westminster, B.C., south to Blaine, Wash. The portion of the line from New Westminster to Olivers, 9.80 miles, is being built by the V.V. and E., and from that place to the International Boundary north of Blaine, 11.32 miles, is being built by the V.T.F. and Ry. Co." When completed this piece of line will permit of the abandonment of the present New Westminster Southern Ry.

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At a meeting of the creditors of the J. B. McManus Co., of Memramcook, N.B., Jan. 4, a composition of 30c. on the dollar, payable in cash within 30 days, was accepted.

The G.T.R., it is announced, will not attach private cars to the fast trains between Montreal and Ottawa. The ordinary travel by the trains is so heavy that it is impossible to make schedule time with the added weight of a private car.

The Car Service Committee of the American Railway Association reported Jan. 15 that the Canadian and U.S. railways had 206,800 freight cars in excess of business demands. Shortages exist on only a few roads, the total number of cars that could be used on these roads amounting to 774. The figures are compiled from reports made to the committee by 158 companies.

Inquiry into C.P.R. Facilities.

A. F. Dillinger, Operating Assistant to the Chief Traffic Officer of the Board of Railway Commissioners, who was directed in April last to make an enquiry into certain complaints about the C.P.R., has made the following report:

"That the C.P.R. Co., within the period of 12 months next preceding the issue of the order, failed, and does now and up to the time of the making of this report, fail to furnish at the place or places of starting on its railway, or at the junction or junctions of its railway with any other railway or railways, and at the stopping place or places established for such purpose, adequate and suitable accommodation for the receiving and loading of traffic offered for carriage upon its railway; and to furnish adequate and suitable accommodation for the carrying, unloading, and delivering of such traffic; and without delay, and with due care and diligence, to receive, carry and deliver such traffic; and to furnish and use all proper appliances, accommodation, and means necessary for receiving, loading, carrying, unloading and delivering such traffic.

"That the company failed, and does fail as aforesaid in not furnishing at the points named the requisite number of cars to move the freight offered for carriage at these points; and in its inability to utilize to the best advantage the motive power the company has. In my opinion the causes for such failure have been and are largely if not entirely—the need of additional facilities, such as additions to roundhouses, repairs to machine shops, and additional yard, siding, and warehouse accommodation properly and expeditiously to care for the same; the abnormal increase in traffic; the particularly severe winter; the refusal and failure of consignees to take prompt delivery of traffic on account of their inadequate accommodation and teaming facilities, causing congestion at shipping points and at points of destination; delays at the larger terminals caused by the customs requirements; consignment of freight to order, requiring additional shunting which causes delay in placing and unloading, and the consequent congestion at terminal yards.

"The company is not possessed of all proper appliances, accommodation, and means necessary for receiving, loading, carrying, unloading, and delivering the traffic which will probably be offered immediately or within the two years next succeeding the issuance of the order hereinbefore referred to, at all places of starting on its railway, at all junctions of its railway with other railways, and at all stopping places established by it for such purpose, for carriage upon its railway. The company is possessed of a sufficient number of locomotive engines, cars, and snow-fighting appliances, but is not possessed of a sufficient number of roundhouses and repair or machine shops, yards, sidings, and warehouse accommodation.

"The company had in use on its system on April 15, 1907, the following equipment, viz., 40,336 cars for handling of freight traffic. These include box, stock, flat and coal cars. 1,763 passenger cars. These include all kinds. 1,363 locomotives. Contracts have been entered into for delivery to the company during 1907 of 5,090 freight cars, 156 passenger cars, and 39 locomotives. The company has provided for an expenditure on rolling stock and equipment during 1907 amounting to upwards of $12,000,000. The company is also making provision at its principal terminals, for instance, at Montreal, Toronto, and Fort William, for additional yard room in which to unload traffic; and generally throughout its system for additional roundhouses and repair or machine shops, storage, and sorting yards, sidings, and warehouse accommodation. The company is also double-tracking its railway between St. Anne's, Que., and Smith's Falls, Ont., and between Fort William, Ont., and Winnipeg. The portion of the line between St. Anne's and Smith's Falls is to be completed in 1907, and that between Fort William and Winnipeg by the end of 1908. The effect of this double-tracking must necessarily be to cause delay in the movement of traffic while the construction work is going on. This will be, of course, only temporary, and there is no way that it can be overcome. The provision made for additional cars and locomotive engines and additional facilities, as stated, will, in my opinion, furnish adequate and suitable accommodation for the receiving, loading, carrying, and delivering of the traffic which will probably be offered for carriage upon the company's railway this year. With the equipment, appliances, and facilities the company is making provision for, added to that it already has, especially after the double-tracking of the portions of its railway herein referred to is completed, the company will, in my opinion, be in a position to enable it, without delay and with due care and diligence, to receive, carry, and deliver all traffic offered for carriage upon its railway.

"The effect upon the power of the company to receive, carry, and deliver traffic without delay, of compliance with the provisions of the Lord's Day Act, will, in my opinion, mean a loss of 21% per week, or, in other words, the company would move only 79% of its capacity during the week.

"It is impossible to state with any definiteness just how far and to what extent the company has been prevented by any of the causes set out in the second paragraph of its answer of Feb. 27, 1907, to the enquiries made by the letter of the Secretary of the Board of Feb. 14, 1907, from receiving, carrying, and delivering traffic without delay, and how far and to what extent any of such causes are likely to continue to prevent the said company from doing so. Certain of these causes for delay, viz., the inability and refusal of merchants to take prompt delivery of freight on account of their inadequate accommodation and teaming facilities, causing congestion at shipping point, en route and at destination; delays for customs requirements; consignment of freight to 'order' requiring much additional shunting, without additional charges to owners and causing delays in placing and unloading, and congestion of terminal yards; too long free allowance for loading and unloading certain classes of freight, permitting dealers to use rolling stock as warehouses, and make deliveries to and from cars direct instead of compelling prompt loading and unloading; the Manitoba Grain Act, as it relates to the distribution of cars; one of the greatest factors in reducing car supply could, in my opinion, be removed or lessened by—merchants increasing their accommodation for delivering and receiving freight at shipping points and points of destination; a more prompt entry or payment of the customs duty by the consignee of shipments subject to the Customs Act; doing away with the practice of consigning freight 'to order'; the railway company furnishing more adequate accommodation at points of shipment and destination, for the loading and unloading of such freight as is given too long free allowance after it has been placed 24 hours; amending the Manitoba Grain Act.

"In respect of this last, under the Act of 1903, amending the Manitoba Grain Act, 1900, the railway agent at each station where grain is shipped keeps what is called an 'order book' for the distribution of cars,

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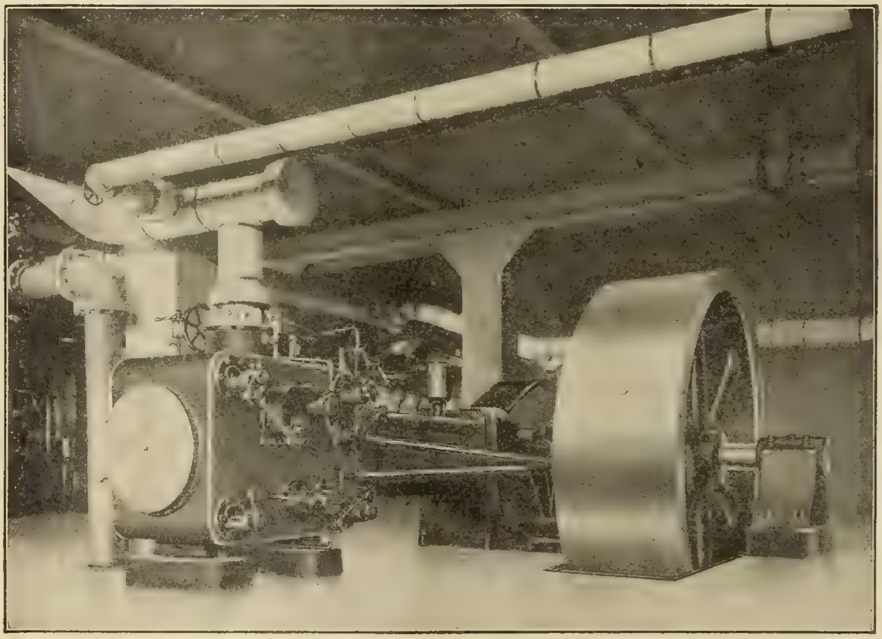

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which is open to the public, and in which applicants make order according to their requirements. The cars so ordered are awarded to applicants according to the order in time in which such orders appear in the order book, without discrimination between elevator, flat warehouse, loading platform, or otherwise. The cars are distributed as follows: Beginning at the top of the list in the order book and proceeding downwards to the last name entered on the list, each applicant shall receive one car as quickly as cars can be supplied; then beginning at the top of the list of unfilled orders and proceeding downwards again to the bottom of the list, giving each person whose name appears on the order book as having unfilled orders one car, and so on until all the orders have been filled. The Act provides that no applicant shall receive more than one car in any one round. The practical working out of the Act necessarily involves delay. To illustrate: Assume that there are three elevators and a grain loading platform at a shipping point that will accommodate two or at least three cars. There are eight applicants for cars—five farmers and the three elevators. Ten cars are sent out, three of which are placed at the loading platform and one at each elevator. The elevators load their cars in 30 minutes or an hour; the farmers at the loading platforms are allowed 24 hours within which to load. In the meanwhile the elevators cannot secure any more cars until the other two farmers receive one car each. The result is that the additional equipment provided at this point is tied up until the last two farmers get their cars. Were the terms of the Act strictly adhered to, the railway companies would not, in my opinion, be able to move 60% of the crop in any one year. One solution of the difficulty which occurs to me would be to so amend the Act as to permit farmers desiring to load at platforms to be supplied with all the cars the loading platforms will accommodate before any elevator gets any, and that the elevators for that day be allowed to load all the remainder of the cars that may be on hand—these remaining cars to be apportioned between the elevators in proportion to the number of thousand bushels in each elevator—that is to say, the elevator having the largest number of thousand bushels for shipment to receive the largest number of cars. This, of course, is not to apply where wheat is in store, but only in the case of wheat for shipment. Some such arrangement as the one suggested would, in my opinion, keep farmers supplied with cars at the platforms, help out farmers who load through the elevators, ensure better prices to those who have to use the elevators, and at the same time give at least twenty per cent. better despatch to cars and improve transportation to the same extent. Another solution would be to provide that the farmers load through elevators.

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The C.P.R. has been fined $200 for violation of the Lord's Day Act, by allowing a train consisting of one loaded and 14 empty cars to leave Strathcona, Alta., Oct. 6, 1907.

The Michigan Central Ry. has filed with the Board of Railway Commissioners its standard passenger tariff C.R.C. no. 750, for its lines in Canada, showing a maximum basis of 3c. a mile, and the tariff has been approved.

The amount accruing to the province of Ontario during 1907 from the tax on railways was $390,000, against $376,364 in 1906. Of this amount $30,000 is applied by statute towards the cost of the Railway and Municipal Board; one-half of the remainder to the Government, and the remainder is distributed among the municipalities according to a per head rate.

Great Northern Railway Report.

The report of the directors for the year ended June 30, 1907, presented at the annual meeting recently, said that as shown by the last annual report the capital on June 30, 1906, was $150,000,000. On Dec. 11, 1906, the directors, subject to the approval of the stockholders, authorized the increase of the capital by $60,000,000, such additional stock to be issued and paid for in cash at par, and the proceeds used to provide for additional equipment, additional facilities and terminals on existing lines, including second main track, and for reduction of gradients, improvement of lines, and to acquire the stocks or bonds, or both, of the following companies: Dakota and Great Northern Ry., Montana and Great Northern Ry., Billings and Northern Rd., Washington and Great Northern Ry., Portland and Seattle Ry., Vancouver, Victoria and Eastern Ry. and Navigation Co., Brandon, Saskatchewan and Hudson's Bay Ry., and Midland Ry of Manitoba, and such other securities as the directors might from time to time determine. The shareholders were asked to sanction this increase of capital, but the State of Minnesota brought an action to prevent the increase. After some litigation the Supreme Court held that the act under which the suit was brought was unconstitutional, and the additional share capital was issued. There has been collected on stock subscriptions to June 30, 1907, $34,616,212, but the certificates will not be issued until May, 1908. The capital outstanding June 30, 1907, was $149,577,500, and there were in the treasury 4,225 shares of G.N. stock not used in acquiring 3,380 shares of St. Paul, Minneapolis and Manitoba Ry. Co.'s stock.

The lines to be acquired had, in most cases, been built with funds advanced by the company, and were being operated by the G.N.R. as a part of its system. In the majority of cases these lines were branches or extensions of the St. Paul, Minneapolis and Manitoba Ry. lines, and such as would ordinarily have been built by the Manitoba company. That company had no means of providing the funds to pay for their construction. All of these lines were constructed for cash at the lowest possible cost for roads of the standard required. The securities that have been issued by the subsidiary companies have been applied on such cost. The amounts advanced for construction purposes to June 30 were: Minnesota and Great Northern Ry., $606,699.87; Dakota and Great Northern Ry., $4,011,135.97; Montana and Great Northern Ry., $3,091,915.01; Billings and Northern Rd., $3,154,553.98; Iowa and Great Northern Ry., $1,730,388.08; Washington and Great Northern Ry., $3,300,211.19. The following Canadian companies, upon completion of their lines, will issue stocks or bonds to repay advances made by the G.N. Ry. for construction purposes, up to June 30, as follows: Midland Ry. of Manitoba, $1,857,828.78; Brandon, Saskatchewan and Hudson's Bay Ry., $1,675,221.82; Crow's Nest Southern Ry., $2,349,744.89; Vancouver, Victoria and Eastern Ry. and Navigation Co., $6,574,289.10. The Portland and Seattle Ry. Co. is to be jointly owned by the G.N. Ry. and the Northern Pacific Ry., the proportionate share of the advances being $9,184,794.48, making a total of $37,536,783.17. In addition the company has purchased 2,858 shares of the Kootenay Ry. and Navigation Co. common stock, so that it now owns and holds the entire issue of £500,000 of common stock.

There has been a net reduction of $323,000 during the year of the bonded debt of the St. Paul, Minneapolis and Manitoba Ry. During the year there had been expended $4,999,150.29 on the capital accounts of proprietary companies. A portion of this amount was advanced by the G. N. Ry., and there was advanced for construction $18,315,794.83, and $5,991,532.78 was paid for additional equipment for the G.N.R. There had been placed to the credit of the fund for replacement of equipment $3,083,836.51, of which amount the G.N.R. is responsible for $2,934,976.22. There had been $2,000,000 charged against net revenue, and credited to the fund for permanent improvements and renewals, and there had been charged to the fund $4,036,434.76, the cost of improvements, other than those charged to operation, made during the year to property leased from the St. Paul, Minneapolis and Manitoba Ry.

The gross earnings increased during the year $3,868,121.85; the operating expenses $6,709,852.80, and taxes $279,326.80, causing a decrease of $3,121,057.75 in income from operation. The reduction in rates, some of which were voluntary and others forced on the company, caused a reduction of revenue of about $1,000,000. There was a loss of revenue caused by the excessive snow of the winter of 1906-07, and an increased expenditure of $950,000 to keep the lines open.

The report of the President contained considerable statistical information and details of works of improvement upon existing lines and new construction. The information upon new construction, as regards the company's lines in Canada and the branch lines connecting them with the main line in the U. S., is referred to on another page.

One of the schedules attached to the report shows that of the $396,087.51 received as interest on bonds owned, $77,580 was received from the Nelson and Fort Sheppard Ry., $17,460 from the Columbia and Red Mountain Ry., $13,020 from the Red Mountain Ry., and that of the $996,079.04 received as dividends on stock owned, $30,617.99 was on account of Crow's Nest Pass Coal Co.'s stock held.

REVENUE ACCOUNT.

Gross earnings		$50,048,041.01
Operating expenses	$29,602,029.83	
Taxes	1,882,699.31	
		31,484,729.14
		$18,563,311.87
Income from operation—		
Rentals	$6,219,825.76	
Dividends, etc	2,139,540.00	
Net rentals	$4,080,285.76	
Permanent improvement fund	2,000,000.00	
Replacement fund—Equipment	2,934,976.22	
		9,015,261.98
Transferred to income account		$9,548,049.89

INCOME ACCOUNT.

From revenue account		$9,548,049.89
Other income		3,414,798.16
Total income		$12,962,848.05
Interest accrued on payments made on stock subscriptions	$337,483.13	
Dividend at 1¾% paid Aug. and Nov., 1906, and Feb. and May, 1907	10,469,661.65	
		10,807,144.78
Profit and loss		$2,155,703.27

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The jury at the Toronto assizes, Jan. 17, returned a verdict of guilty against the G.T.R. and the C.P.R., for maintaining a common nuisance at the Bay St. railway crossing, Toronto. The case was brought forward as the result of an accident May 24, 1907, when two men were killed. The railway companies will appeal against the verdict.

N. CURRY, President
N. A. RHODES, Vice-President

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J. M. CURRY, Sec.-Treas.

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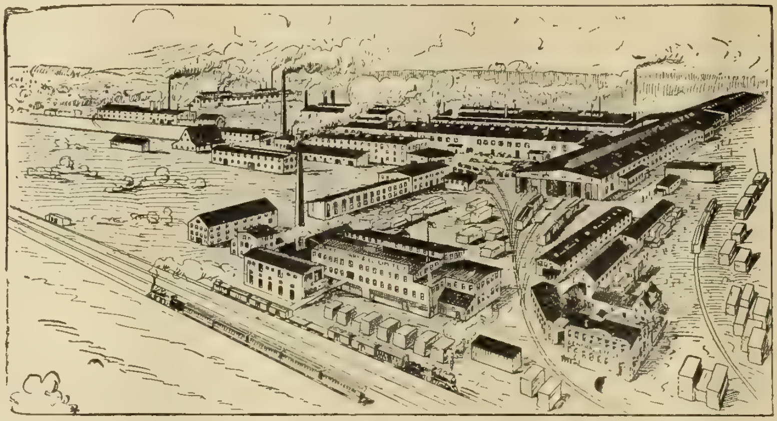

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RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

The Alberta Oil, Coal and Wheat Ry. Co. was incorporated by an act passed by the Alberta Legislature at its first session in 1906, and the town of Pincher Creek has guaranteed bonds to the extent of $25,000 towards the construction of a line from that place to the C.P.R. Crow's Nest Branch at or near Pincher station. It is said that construction will be proceeded with in the spring. J. E. Shoultz is Vice-President of the company, and it is said that English capital is being provided to construct the line. (Jan., pg. 19).

Algoma Central and Hudson Bay Ry.—Replying to a question in the House of Commons Jan. 8, the Minister of Railways said there had been completed 69.35 miles of main line, 20.29 miles of branch lines and 9.93 miles of side tracks, these figures having been supplied to the Government in a statement signed by and sworn to by J. S. Wynn, acting Manager, and A. H. Chitty, Assistant Treasurer. The total mileage subsidized and under construction was, on the main line, 200 miles; on branch lines 25 miles, total 225 miles. The subsidy was paid as follows: On main line, Dec. 17, 1901, $240,624; on branch line, Feb. 24, 1902, $76,800; on main line, June 17, 1902, $63,200; on main and branch lines, Oct. 15, 1902, $202,912; on main and branch lines, Oct. 4, 1904, $331,378.76; on main and branch lines, April 12, 1905, $10,061.24. Total subsidy paid, $924,976, or $4,111 per mile of the whole mileage stated, the payments having been made on progress estimates covering the whole distance under subsidy. These amounts were paid to the A.C. and H.B. Ry. Co. The Department was not aware of any other amounts claimed by the company on subsidy account. No special subsidies were applied for or granted on account of bridges or extra cost of construction. (See also Pacific and Atlantic Ry.). (Dec., 1907, pg. 889).

Atlantic, Quebec and Western Ry.—No additional track was laid during 1907. A contract has been entered into with the New Canadian Co., for the construction of an extension from Port Daniel to Gaspe, Que., 82½ miles. The headquarters of the construction company are at Paspebiac, Que., the chief offices being in London, Eng. (Dec., pg. 889).

The Cape Breton Ry., it is reported, contemplates starting early in the spring upon the construction of an extension of its line from St. Peter's to Louisburg, N.S., about 31 miles. A meeting was held at Sydney, N.S., Jan. 15, to consider the construction of the projected extension and pass a resolution favoring the granting of running powers for the company over the Intercolonial Ry. branch from Louisburg to Sydney, which the Government is being asked to construct. G. E. Johnson, St. Peter's, N.S., is General Manager.

Resolutions were adopted at the meeting held at Sydney, N.S., Jan. 15, asking the Provincial Legislature to pass an act to grant a loan to a company at the rate of $13,500 a mile for railway extension in Cape Breton and Richmond counties.

Caraquet, N.B.—Application will be made at the current session of the New Brunswick Legislature for an act incorporating a company with power to construct a railway from a point on the main line of the Caraquet Ry. about five miles east of Caraquet, northeasterly to a deep water terminus at or near St. Paul's Church in Caraquet parish. It is also desired to have power to amalgamate with the Caraquet Ry., the Intercolonial Ry. or other railways, and to issue debentures on account of construction. J. J. Harrington, Bathurst, N.B., is solicitor for the applicants.

Deer River, Minn., to Fort Frances, Ont.—A U.S. press report states that another railway is about to be constructed from a Minnesota point to the International Boundary at Rainy River, opposite Fort Frances, Ont. The point from which it is stated the line will start is Deer River, a station on the Great Northern Ry. The Duluth, Rainy Lake and Winnipeg Ry. has recently been completed from Virginia to opposite Fort Frances, and the Minnesota and International Ry. has also recently completed a line from Bimedji to International Falls on the Rainy River, a little to the west of the point at which the D.R.L. and W. Ry. reaches the river.

Dominion Atlantic Ry.—It is proposed to construct a spur line from Centerville, on the Cornwallis Valley branch, running south and west to the company's main line near Middleton, N.S. Local reports state that a new freight and passenger station will probably be built at Annapolis during the current year. (Jan., pg. 19).

Fort William, Ont.—The Ontario Legislature will be asked at the current session to confirm a number of this city's by-laws, and to give the corporation power to construct one or more bridges over the Kaministikwia, Mission and McKellar rivers, suitable for railway, highway and all other traffic, with the right to lease running rights to any railway, corporation or person, or to charge tolls for the use of the bridge or bridges; and with the consent of the ratepayers to issue debentures, payable in 40 years, to provide for the cost of the same.

Fort William Terminal Ry. and Bridge Co.—The Dominion Parliament is being asked at its current session for an act granting an extension of time for the commencement and completion of the company's lines. W. A. Dowler is solicitor to the provisional board of directors, and the present office of the company is at 502 Victoria Ave., Fort William, Ont. A meeting of shareholders has been called to be held at the offices Feb. 10, for the purpose of electing permanent directors, providing for the payment of preliminary expenses, surveys, etc., and ratifying and approving of the application to Parliament for an extension of time for construction. The plans of the company for its several lines at Fort William have been approved by the Board of Railway Commissioners.

Great Northern Ry. Lines in Canada.—The extension of the Crow's Nest Southern Ry. from Fernie to Michel, B.C., 23 miles, is expected to be placed in operation early in Feb. (Jan., pg. 19).

A report from Spokane, Wash., says the Vancouver, Victoria and Eastern Ry. and Navigation Co., and the Washington and Great Northern Ry., constructed during 1907 about 94 miles of line from Curlew, Wash., to 20 miles west of Keremeos, B.C., crossing the International Boundary line three times. The line is under contract to Princeton, and the surveys are completed to Cloverdale on the New Westminster Southern Ry., which is being reconstructed. The Vancouver, Westminster and Yukon Ry. from Vancouver to New Westminster, and the Victoria Terminal Ry. and Ferry Co.'s line from Port Guichon to Cloverdale, have been taken over and now form part of the lines of the Vancouver, Victoria and Eastern Ry. and Navigation Co. A contract is reported to have been let to F. P. Howard, Maroon Valley, B.C., for construction work on the line near Hedley, B.C. (Nov., 1907, pg. 831).

Halifax and Southwestern Ry.—The short piece of line to connect the Liverpool and Milton Ry. with the company's main line at Liverpool, N.S., is reported to be nearing completion. The rest piers for the draw span in the bridge over the Mersey at Liverpool are being erected. The contractors are the Lindsay Construction Co. (Jan., pg. 21).

The Hillcrest Ry., Coal and Coke Co. during the year ended June 30, 1907, constructed 1.50 miles of line. The company was incorporated by an act passed by the Dominion Parliament in 1906 to construct a railway from Morrissey, via the Crow's Nest Pass to Hillcrest Jct., on the C.P.R., thence to Cardston, Alta., with branches to several specially named points. The provisional directors named in the act are: M. P. Davis, J. Thompson, Ottawa; C. P. Hill, Hillcrest, B.C.; W. L. Bell, Winnipeg, Man.; C. E. Ross, New York. (Aug., 1906, pg. 453).

Hudson Bay-Pacific Ry.—An office has been opened in Victoria, B.C., by Col. D. B. May, of Seattle, Wash., one of the promoters. The company has been organized under the laws of the State of Washington, with the following officers: President, Col. D. B. May; Vice-President, F. Belinger; Treasurer, W. H. Duval; other directors: J. McLachlan, Los Angeles, Cal.; Senator Cantor, New York; Senator J. K. Kerr, Toronto; J. P. Walls, Victoria, B.C. Application is being made at the current session of the Dominion Parliament for an act of incorporation and notice has been given that the British Columbia Legislature will be asked for an act incorporating a company to construct so much of the line as will be in that Province. Colonel May says that the company does not propose to ask for any subsidies, though it may later on ask permission to purchase public lands at a low valuation in connection with a colonization plan. (See Port Simpson and Eastern Ry., Jan., pg. 21).

Intercolonial Ry.—Tenders are under consideration for the construction of a block of cribwork to fill in a space in front of the wharf at Mulgrave, N.S., one of the points between which the car ferry Scotia operates.

At a meeting at Chatham, N.B., Jan. 4, a committee of the Board of Trade was appointed to secure options on a right-of-way for a new route into the town, with a view of asking the Government to construct it. The proposed new route runs for two miles along the water front, and would shorten the distance by about a mile, in addition to cutting out the heavy gradient near Nelson. The new line, it was stated, could be built for $10,000 a mile, or $50,000 in all; a bridge over Morrison's cove would cost about $80,000; a new station and facilities, $20,000; adding $35,000 for land damages, and $15,000 for incidentals would bring the total estimated cost of the line to $200,000.

At Parrsboro, N.S., the view has been expressed that the Government will construct a loop line from Amherst to Truro. The present line between these points goes over the Cobequid Mountains, and is considerably blocked by snow in winter. The suggested loop would add seven miles to the distance between Amherst and Truro, but it would run through Parrsboro, and a district not now completely opened up by railway lines.

A meeting has been called to be held in Sydney, N.S., for the purpose of urging on the Dominion Government the necessity of constructing a branch of the Intercolonial Ry. from Sydney to Louisburg, N.S. (Jan., pg. 21).

Kettle Valley Lines.—W. T. Beck, President of the Spokane and British Columbia Ry., the Washington, U.S., company owning the U.S. portion of the K.V. lines, is quoted as stating that the construction of the projected extension from Republic to Spokane, Wash., is tied up pending the settlement of the differences with the Great Northern Ry., respecting the right-of-way down the San Poil River valley through the Colville Indian reserve. The S. and B.C.R. obtained

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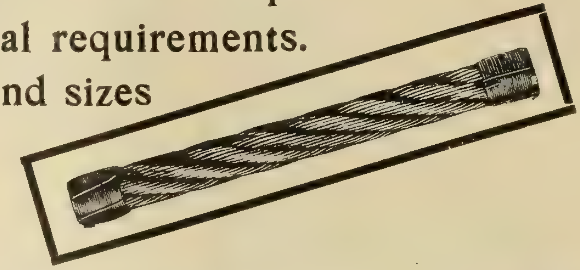

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a grant of a right-of-way through the reserve under the general act of Congress of 1899, and early in 1907 let a contract for the construction of 15 miles of line between Republic and the north border of the reservation. The G.N.R. commenced the construction of a line along the same route, claiming the right-of-way under a special act of 1898. Litigation was commenced and the matter is now before the Supreme Court of the State of Washington.

Respecting construction in British Columbia, Mr. Beck said work on the extension up the North Fork of the Kettle River had been completed from Grand Forks to Lynch Creek, that it was intended to carry this extension as far as Franklin Camp and that further construction would be gone on with during the coming summer. (Jan., pg. 21).

The section of the line from Grand Forks to Lynch Creek, B.C., 18.5 miles, has been completed and a regular train service is being operated over it.

Lotbiniere and Megantic Ry.—See Quebec Eastern Ry.

Manitoulin and North Shore Ry.—The Minister of Railways replying to a question in the house of Commons, Jan. 8, said there had been completed 13.53 miles of main line, and 1.54 miles of branch line, and on account of the subsidy there was paid $32,000 on Jan. 23, 1903. The company had constructed 12.75 miles of line, commencing at Sudbury, towards Little Current, Ont., and by such construction claimed to have earned the full subsidy of $6,400 a mile, or $81,600, of which there had been paid the $32,000 mentioned.

Application is being made at the current session of the Dominion Parliament for an act extending the time for the construction of the company's lines of railway. (Mar., 1907, pg. 161).

Newcastle Townsite Northwesterly.—The British Columbia Legislature is being asked this session to pass an act incorporating a company to construct a railway to be operated by steam or electricity from the Esquimalt and Nanaimo Ry., about 500 yards north of the Comox wagon road, following the old East Wellington Ry. right-of-way, or nearly so, until it reaches the Government gazetted wagon road in the mountain district, thence northwesterly for a mile or more. The line is proposed to be constructed for the hauling of logs, ore, mineral or other materials. Authority will also be asked to construct telephone and telegraph lines in connection with the railway, and to develop any waterpower that may be conveniently situated for the operation of the railway or otherwise. F. B. Gregory, Victoria, B.C., is solicitor for the applicants.

Nicola Lake to Vancouver, B.C.—Application is being made at the current session of the British Columbia Legislature for an act incorporating a company with authority to construct a railway from Nicola Lake along the Nicola, Coldwater and Coqueliallu River valleys to Hope, thence along the Fraser River valley to New Westminster and Vancouver. Power is also asked to construct branch lines not exceeding 50 miles, to operate steam and other vessels, and to enter into agreements with other companies, and for other purposes. Livingstone, Garrett and King are solicitors for the applicants.

North Lanark Ry.—Application will be made at the current session of the Ontario Legislature for an act extending the time for the commencement and completion of this projected railway. McGarry & Devine, Renfrew, Ont., are solicitors for the company.

The N.L.R. Co. was originally incorporated by the Ontario Legislature in 1899 to construct a railway from near Mile Lake on the Kingston and Pembroke Ry., to the Canada Atlantic Ry. on the C.P.R. near Arnprior, the line to be operated either by steam or electricity. In 1903 an amending act was passed, changing the location of the line from Blythfield tp. to Ottawa, and authorizing construction along the highway if electricity was to be adopted as the motive power. Some surveys were made in 1905, when a plan and profile was filed with the Ontario Department of Public Works; and in 1906 it was reported but officially denied that the charter had been acquired by the Ottawa and New York Ry., one of the New York Central lines in Canada. (Feb., 1906, pg. 65; June, 1905, pg. 243, and July, 1903, pg. 239).

Orford Mountain Ry.—There is under construction an extension of the line from Mansonville, Que., to North Troy, Vt., about four miles, upon which to Dec. 31, 1907, there had been laid 2½ miles of track. The railway company is doing its own construction, and the extension is expected to be completed during the current year. North Troy is a station on the Newport section of the C.P.R., 44.07 miles from Brigham Jct., and 14.31 miles from Newport, Vt. The company has completed surveys for its projected extension from Windsor Mills to Bromptonville, Que., 8 miles. (Aug., 1907, pg. 565).

Pacific and Atlantic Ry.—Application will be made at the current session of the Dominion Parliament for an act extending the time for the commencement and completion of the company's authorized lines, and to confirm an agreement between the company and the Algoma Central and Hudson Bay Ry. Co. for the amalgamation of the two railways.

The P. and A. R. Co. was incorporated by the Ontario Legislature in 1886, and acts reviving and confirming the same, and amending its provisions, were passed in 1900, 1902, and 1905. The company, by the Dominion Act of 1906, was recognized as a Dominion one, and the railways, except the branch lines, which it was authorized to construct, declared to be works for the general advantage of Canada. Construction was to be commenced by July, 1908, and completed by July, 1911, and authority was given to amalgamate with the G.T.R., the C.P.R., the Manitoulin and North Shore Ry., the Ontario, Hudson's Bay and Western Ry., or the Canada Central Ry. The line originally authorized to be constructed was to extend from the eastern boundary of Ontario, in Glengarry county, westerly via the Ottawa, the Madawaska, Magnetawan, and Spanish River valleys to Lake Superior. Jas. Conmee, M.P., was one of the original promoters. (Aug., 1906, pg. 455).

Prince Edward Island Ry.—Replying to a question in the House of Commons recently, the Minister of Railways said the contract price for the new station at Charlottetown was $58,900, with schedule prices for such other items as were not capable of being determined accurately in advance; E. A. Walberg was the contractor; $66,784.99 had already been paid on account of the work; the Department was unable to say how much was yet payable to the contractor, as the final estimate had not been made. Up to date $7,884.98 had been paid for extras. There were no extras under the schedule, the amount named was for additional work in foundations, drains, sewers, flooring, and waterproofing casement with concrete, grading for and laying reinforced concrete platforms, all of which was done at schedule prices as stipulated in the contract. (Dec., 1907, pg. 889).

Quebec Central Ry.—No new construction work was done during 1907. The company has under survey an extension of its line from St. George, Beauce, to St. Justine, Beauce, about 30 miles. It has not been decided when construction work will be undertaken. (June, 1907, pg. 409).

Quebec Eastern Ry.—A report from the United States says: "Right-of-way has been secured, and surveys completed from Lyster station on the G.T.R., to Lime Ridge, Que., and subsidies on the Quebec end from Lysander to Quebec, and from Lime Ridge to Sherbrooke, are being sought. The total length of the proposed line from Lime Ridge to Quebec is 110 miles. Construction will begin as soon as the desired subsidies are obtained. W. H. Lamby, Secretary and Treasurer, Inverness, Que."

The name of the company mentioned in connection with the information is the Wolfe, Lotbiniere and Megantic Ry. This company was incorporated by the Quebec Legislature in 1901, to construct a railway from the Quebec Bridge over the St. Lawrence, via the Thames valley to Lime Ridge, the terminal point of the Massiwippi Valley Ry., the Canadian line of the Maine Central Rd., a distance of about 90 miles. Various surveys were made and negotiations were carried on with U.S. lines, but no construction has been done. The probability of an amalgamation with the Lotbiniere and Megantic Ry., which has a line in operation from Lyster to St. Jean des Chaillons, was discussed, and in April, 1907, it was reported that the right-of-way had been secured and negotiations were pending with the Lotbiniere and Megantic Ry. to construct the line. Last session of the Quebec Legislature the L. and M. Ry. was vested with all the rights and privileges required to construct a line from its existing line, across the counties of Wolfe, Richmond and Sherbrooke, to Sherbrooke city, with branches not exceeding 15 miles in length, except for the purpose of connecting with other railways. At the same session of the Legislature, a number of those interested in the L. and M. Ry., obtained an act incorporating a company with the title of the Quebec Eastern Ry. to construct a line from Sherbrooke to the southern end of the Quebec bridge, a branch from such line to Lyster station; another branch to Lime Ridge, and other branches not exceeding in any one case 15 miles in length. The company was also given power to acquire the lines of the Lotbiniere and Megantic Ry., the franchises, etc., of the Wolfe, Megantic and Lotbiniere Ry., or to lease the lines. (Aug., 1907, pg. 563).

Southern British Columbia Ry.—The B.C. Legislature is being asked at its current session to pass an act incorporating a company with this title to construct a railway to be operated by steam, electricity or other motive power, for the carrying of freight, passengers and express, with power to construct telegraph and telephone lines, and with all the other privileges usually given to railways. The route of the proposed line is described as commencing six miles east of Kamloops, on the C.P.R. main line, thence running southeasterly through Grand Prairie valley and Salmon River valley to the east line of township 18, range 11, west of the 6th meridian, Kamloops division, a distance of about 30 miles. Barnard and Robinson, Vancouver, B.C., are solicitors for the applicants.

Application is also being made at the current session of the Dominion Parliament for an act of incorporation. McGiverin, Haydon & Greig, Ottawa, are solicitors for the applicants.

Temiskaming and Northern Ontario Ry.—Owing to the open winter construction is being carried on to a much later date on the northerly extension of this line than was anticipated. The chairman of the Commission was quoted as saying recently that it was hoped to be able to keep on the work all winter, and if this can be done the T. and N.O.R. construction will touch the route of the G.T. Pacific Ry. eastern division in May or June. (Dec., 1907, pg. 889)

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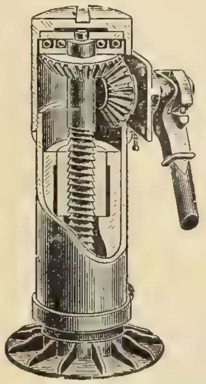
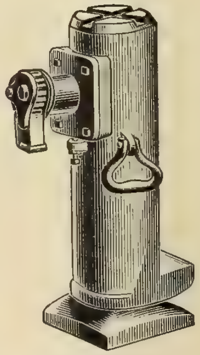


Sectional View



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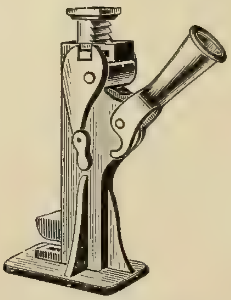

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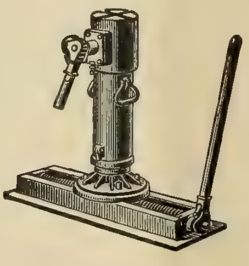

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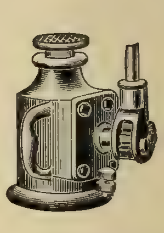

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It is expected that about five miles of track will be completed early in Feb.

J. L. Englehart, Chairman of the Commission, stated Jan. 18, that the line would be completed to the point of junction with the route of the G.T. Pacific Ry. by the end of the current year. This is a distance of 42 miles from the present end of steel. It will be a difficult piece of road to construct because there is a good deal of muskeg, and there will be several heavy cuts to make. There is no rock work on the section. The only difficulty feared is a wet season, which will retard construction considerably. (Jan., pg. 23).

Trains were reported to be running to Matheson, 67 miles north of Englehart, or 205 miles from North Bay, where the line makes connections with the C.P.R. and G.T.R. At Englehart the roundhouse, machine shops and coal chutes have been completed.

The Kerr Lake branch is expected to be opened for traffic Feb. 15. The branch starts from the main line about 1½ miles south of Cobalt, and extends for about 5½ miles to Kerr Lake, serving a number of mining properties.

Thessalon and Northern Ry.—A deputation consisting of A. E. Dyment, A. A. Burke, J. B. Dobie, H. Appleton, of Thessalon, Ont., and W. Greene, of Marquette, Mich., waited on the Minister of Railways at Ottawa, Jan. 10, to ask Government aid towards the construction of this projected railway. The company was incorporated last session of the Ontario Legislature to construct a line from the C.P.R. Algoma branch southeasterly to Thessalon and northeasterly to the Mississagua River. The intention of the company is to construct a line ultimately to the C.P.R. transcontinental line. The Minister of Railways promised consideration of the proposal, favorably commenting on the line southerly to Thessalon. (Mar., 1907, pg. 163).

Trans-Canada Ry.—Application is being made at the current session of the Dominion Parliament for an act extending the time for the commencement and completion of this projected railway. The notice is signed by J. G. Scott, acting Secretary. This project is one in which a number of the directors and officers of the Quebec and Lake St. John Ry. were interested. Some surveys were made from Roberval to James Bay, and some grading has been done westerly from that point. (June, 1905, pg. 245).

Western Alberta Ry.—The Dominion Parliament is being asked at its current session to pass an act continuing and extending the powers conferred upon the W.A.R. Co., by the act of 1905, and extending the time for the commencement and completion of the projected railway. A. H. Beaton, Toronto, is solicitor for the company.

The company was originally incorporated by the Dominion Parliament in 1898, and a subsidy was voted in the following year. In 1900, 1903, and 1905, acts were passed extending the time for construction, and a renewal of the subsidy was voted in 1904. The act of 1905 gave the company power to enter into agreements for amalgamation, etc., with the Alberta Ry. and Irrigation Co. The railway authorized to be constructed is from the International Boundary at some point west of range 20 west of the 4th principal meridian, northwesterly through the Old Man valley, past Canmore and Anthracite, to the headquarters of the North Saskatchewan River, thence to the easterly base of the Rocky Mountains.

White Pass and Yukon Ry.—United States papers state that construction is progressing on a branch leading to the Whitehorse copper fields, two miles of grading having been completed, and 1½ miles of track laid. A. L. Berdoe, General Manager, was quoted by a Seattle, Wash., paper as having said, Dec. 4, 1907, that construction of this branch would be commenced in the spring. We were advised in Oct., 1907, that while it was proposed to construct a branch through the Whitehorse copper fields the surveys had not been completed. At the recent annual meeting of the company in London, Eng., S. H. Graves, President of the operating companies, said to give this connection with the Whitehorse copper district "involves making a branch line of some 14 or 15 miles long, for which an act of the Canadian Parliament is required. Application has been made for this act, which it is hoped may be passed at the coming session in time to enable construction to be completed before the close of next summer." (Jan., pg. 23)

Upon the consideration of the application of the company (the Canadian charter being the British Yukon Ry.) for power to extend its line northwesterly to the Tahkeena River, coming before the Railway Committee of the House of Commons, Jan. 13, a question was raised as to whether the Board of Railway Commissioners could exercise an effective control over the rates. Of the lines owned by the company 12 miles are in Alaska —from Skagway, the seaport, to the International Boundary at Whitehorse. The Minister of Railways promised to obtain information upon the point and also whether the present rates charged by the company were satisfactory. Pending the obtaining of this information the consideration of the bill was held over.

Wolfe, Megantic and Lotbiniere Ry.—See Quebec Eastern Ry

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White Pass and Yukon Ry. Report.

The report of the directors for the year ended June 30, 1907, includes the results of the operations of the local companies (all of whose capital is owned by the White Pass and Yukon Ry. Co.) for their financial year, which ended Dec. 31, 1906. The profit and loss account, after providing for debenture stock and debenture interest and all charges, showed a net profit of £87,904 2s. 9d., to which was added the balance of £14,765 4s. 5d. brought forward from the previous year, making a total of £102,669 7s. 2d. Out of this a full sinking fund instalment of £16,586 had been provided, and an interim dividend of 4s. per share, absorbing £27,500, paid in July. A further dividend of 6s. per share, absorbing £41,250, was recommended to be paid Jan. 15, leaving a balance of £17,335 7s. 2d. to be carried forward.

The report of S. H. Graves, President of the local companies, gave information as to the traffic over the company's railway, and other lines. During 1906 there were carried on the railway 13,720 passengers and 32,204 tons of freight; the average haul was 79.60 miles per passenger, and 105.94 miles per ton of freight, while the average load per car was 11.94 tons. The operating expenses of the rail division show a decrease of $33,044.24 as compared with 1905, and of $58,381.68 as compared with 1904. The company's fleet carried 8,262 passengers and 27,574 tons of revenue freight. The company operated 11 steamers and nine barges on the river and lakes, and held eight steamers and one barge in reserve. Two barges were built at the company's Whitehorse shipyards during the year; and some improvements were made at the company's Dawson shipyard. The operating expenses show a reduction of $36,153.60 as compared with 1905. "A better idea of the saving," said Mr. Graves, "is gained by comparison with the results of 1904, which shows that in 1906 we carried 1,413 more passengers and 1,508 more tons of freight at a reduced cost of $58,994.15. The winter stage line was carried on as usual between Whitehorse and Dawson, 167 trips being made (equivalent to 55,100 miles), carrying 38 tons of mail, 781 passengers, four tons of parcel freight (including gold dust), and 215 tons of ordinary freight.

GENERAL BALANCE SHEET.

Shares, mortgages and debentures, at cost, of local railway and navigation companies.. ...		£2,374,011 10 10
Balance due from local companies		98,899 11 9
Cash at bankers and in hand...		683 18 7
Sinking fund investments (at cost)—		
£94,431 White Pass and Yukon Ry.Co., 5% consolidated first mortgage debent'e stock.	£87,150 18 2	
Cash in hands of trustees for investment......	2,243 11 11	
		89,394 10 1
Commission paid for extension of 6% mortgage debentures (navigation bonds)........	12,777 15 0	
Less one-fourth written off in 1906..........	3,194 8 9	
	£ 9,583 6 3	
Less proportion charged against this year's profits.	3,194 8 9	
		6,388 17 6
		£2,569,378 8 9
Share capital—		
Authorized 170,000 shares of £10 each. £1,700,000		
Issued 137,500 shares of £10 each fully paid..............		£1,375,000 0 0
5% consolidated first mortgage debenture stock—		
Authorized.... ... £750,000		
Issued......................		746,702 0 0
6% mortgage debentures (navigation bonds), authorized and issued.....................		255,555 0 0
Sundry creditors..		57 11 6
Sinking fund—		
As per last balance sheet.....	£68,791 13 9	
Amount set aside out of profits for year ended June 30, 1906, in accordance with terms of agreement, dated Apr. 22, 1902.	16,169 0 11	
Interest on sinking fund investments to June 30, 1907..	4.433 15 5	
		89,394 10 1
Profit and loss account		102,669 7 2
Balance of profit per balance sheet at June 30, 1906.......	£99.684 5 4	
Less amount carried to sinking fund.........	16,169 0 11	
	£83,515 4 5	
Less dividends paid on July 16, 1906, and Jan. 15, 1907.	68,750 0 0	
	£14,765 4 5	
Add profit for year to June 30, 1907, as per account above.	87.904 2 9	
	£102,669 7 2	
		£2,569,378 8 9

Following are the officers and directors for the current year: Chairman, C. C. Macrae; Vice-Chairman, Hon. S. Carr-Glyn; other directors, J. Dugdale, E. Hanson and E. F. North; Secretary, W. H. P. Stevens, all of London, Eng. President of the local companies, S. H. Graves, Chicago, Ill., and Vancouver, B.C.; General Manager, A. L. Berdoe, Vancouver, and Skagway, Alaska.

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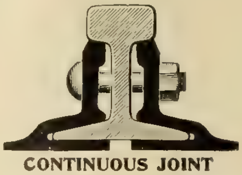
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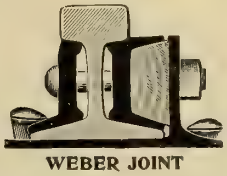
in use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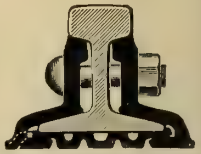
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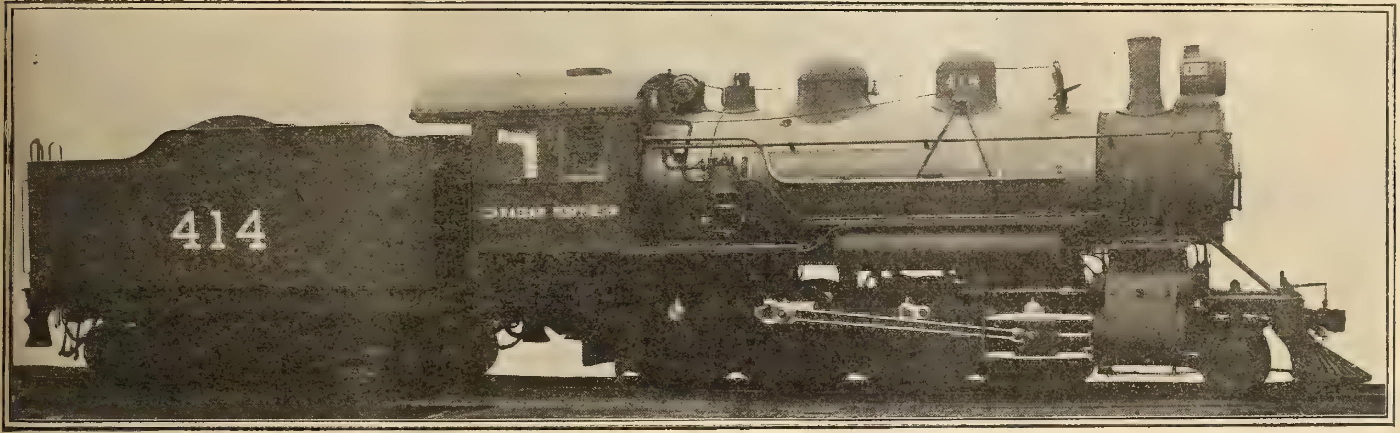
Railway Rolling Stock Notes.

The Canadian Northern Ry. received between Dec. 15, 1907, and Jan. 15, 5 snowplows from Rhodes, Curry & Co., Ltd., Amherst, N.S.

The G.T.R. received the following additions to rolling stock between Dec. 14, 1907, and Jan. 11: seven Richmond compound consolidation engines; 2 first-class passenger coaches; 10 baggage and express cars, and 32 cabooses.

The Locomotive and Machine Co. of Montreal, during Dec., 1907, delivered 6 ten-wheeled locomotives to the Temiskaming and Northern Ontario Ry., 7 consolidation engines to the Grand Trunk Ry., 4 consolidation engines to the Canadian Northern Ry., and 1 engine to the Crow's Nest Pass Coal Co.

Following are dimensions, etc., of the 500 box cars of 60,000 lbs. capacity ordered by the C.N.R. from Rhodes, Curry & Co., Amherst, N.S., mentioned in our Jan. issue: length, over end sills, 36 ft. 9¾ ins.; width, over side sills, 9 ft. 0¾ in; wheel base of truck, 5 ft. 2 ins., with Westinghouse air brakes and Latrobe couplers.



CONSOLIDATION LOCOMOTIVE BUILT FOR THE CANADIAN NORTHERN RY. BY THE CANADIAN LOCOMOTIVE CO., LTD.

The 50 steel hopper ore cars ordered by the Canadian Northern Ry. from the Dominion Car and Foundry Co., as announced in our Jan. issue, will have the following special equipment: Simplex bolsters and brake beams, Susemihl roller ball bearings, McCord journal boxes, Westinghouse air brakes, Latrobe steel couplers.

The White Pass and Yukon Ry. during the financial year of 1906, the report of which has recently been issued, sold one locomotive to the Klondyke Mines Ry. and one to the Tanana Mines Ry. It also built seven box cars, five stock cars and 10 flat cars, and repaired two cabooses (reported dismantled in 1905) at its Skagway shops.

The Intercolonial Ry., between Dec. 18, 1907, and Jan. 15, received the following additions to rolling stock: 98 box cars, 80,000 lbs. capacity; 36 flat cars, 80,000 lbs. capacity, and 73 hopper cars, 30,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; 19 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont., and 10 other flat cars, 80,000 lbs. capacity.

The C.P.R. between Dec. 16, 1907, and Jan. 19, received the following additions to rolling stock: 2 locomotives, 131 box cars, 27 refrigerator freight cars, 60 flat cars, 10 first-class passenger cars, 5 snowplows, from its Angus, Montreal, shops; 1 rotary snowplow from the Locomotive and Machine Co. of Montreal, and 87 steel coal cars from the Dominion Car and Foundry Co., Montreal.

The C.P.R. between Dec. 16, 1907, and Jan. 19, placed the following orders for rolling stock: 10 passenger locomotives, Pacific type; 1 sleeping car, 2 first-class passenger cars, 2 tourist cars, 1 colonist car, 1 baggage car, 2 mail and express cars, 1 flanger, 1 clearance car, 84 box cars, 3 refrigerator freight cars, 16 stock cars, 33 flat cars, 2 Hart ballast cars, at its Angus, Montreal, shops; 4 vans at its Farnham, Quebec, shops; and 7 steel coal cars, 1 steel ore car, with the Dominion Car and Foundry Co., Montreal.

The C.P.R., in addition to the orders enumerated in another item in this column, have ordered from the Dominion Car & Foundry Co. 400 improved steel underframe Hart-convertible cars for April delivery. Capacity, 50 tons; length between end sills, 36 ft. 10 ins.; length inside, 35 ft. 3 ins.; width over all, 10 ft. 2 ins.; width inside, 8 ft. 8 ins.; height, 8 ft. 7¼ ins.; truck centres, 27 ft. 10 ins. Special equipment: Westinghouse air brakes, Tower couplers, Simplex truck bolsters and brake beams, Susemihl side bearings. The cars were designed by the Hart-Otis Car Co., Ltd., and will be built under license from them.

The cost of the three motor cars constructed in Canada for the Intercolonial Ry. was $18,600 each, and the one constructed in Hungary cost $16,000. The Minister of Railways stated recently that two of these cars were in operation, one between St. John and Hampton, N.B., and one between Halifax and Windsor, N.S. Tests had not been reported to the Department, as certain difficulties developed in the way of balancing which will take some time to work out. Whether these cars would be adopted for branch lines on the Intercolonial Ry., and for the Prince Edward Island Ry., depended upon the results secured on the report of the tests made. No more of the cars were being built at present.

Following is the specification of the consolidation engines recently delivered to the Canadian Northern Ry. by the Canadian Locomotive Co., Kingston, Ont., one of which is illustrated on this page. Another 40 similar engines, mention of which order was made in our issue of Sept., 1907, p. 655, are under construction for delivery during the early part of this year:

Type of engine	consolidation.
Fuel used	bituminous coal.
Weight in working order, drivers	151,000 lbs.
" " " total	170,000 lbs.
Wheel base of engine, rigid	15 ft. 6 ins.
" " " total	23 ft. 6 ins.
" " " and tender	56 ft.
Heating surface, fire-box	176 sq. ft.
" " tubes	2,259 sq. ft.
" " total	2,435 sq. ft.
Diam. of driving wheels	57 ins.
Material of driving wheels, centres, main, cast steel: others, cast iron.	
Diam. and length of driving journals	9 and 12 ins.
" of cylinders	21 ins.
Stroke of cylinders	26 ins.
Type of boiler	radial stay.
Working pressure	200 lbs.
No. of tubes	310
Diam. "	2 ins.
Length "	14 ft.
Brakes	Westinghouse.
Weight of tender, loaded	140,000 lbs.
Tank, style	hopper
" capacity	6,000 imp. gals.
Coal capacity	12 tons
Truck, style	4-wheel.
Diam. of wheel	33 ins.
Kind of wheel	cast iron, chilled tread.
Diam. and length of journal	5½ ins. and 10 ins
Brake beam	Simplex.

◆

Accidents to Railway Employes.—The Secretary of the Board of Railway Commissioners has issued the following circular to railway companies: "In considering the numerous reports of investigations of accidents, the Board has been impressed with the fact that a large number of railway men employed on wrecking crews are either injured or lose their lives in the clearing of wrecks and the handling of wrecked and disabled engines. The Board would, therefore, urge upon railway companies the advisability of issuing a circular to their employes warning them that more care should be exercised in the clearing of wrecks, and when coupling or uncoupling of engines which have been injured in wrecks is required to be performed that the employes engaged in such work be placed under the charge of a responsible foreman, who will direct their movements and see that their lives are not needlessly jeopardized."

Freight Rates to Yukon.—The Minister of Railways, replying to a question in the House of Commons recently, said the Board of Railway Commissioners had not made any report or order respecting the freight rates charged on the White Pass and Yukon Ry. The Board held a sitting at Dawson for the purpose of hearing the complaints against the rates charged on the railway, but no evidence was laid before it to form an opinion whether the rates were higher than were reasonable under the circumstances of the traffic. The Board then directed its Chief Traffic Officer to make full enquiries and report upon the subject. This officer investigated the books, accounts and records of the railway company, and subsequently obtained, by authority of the Board, the services of an accountant to assist him in dealing with them. On account of the labor involved and the pressure of work in his department, and on account of his having been obliged to undergo a surgical operation during the past summer, the Chief Traffic Officer had not made any report in the matter. The Board, however, expected to have the report shortly, when it would be in a position to give a decision upon the various points raised.

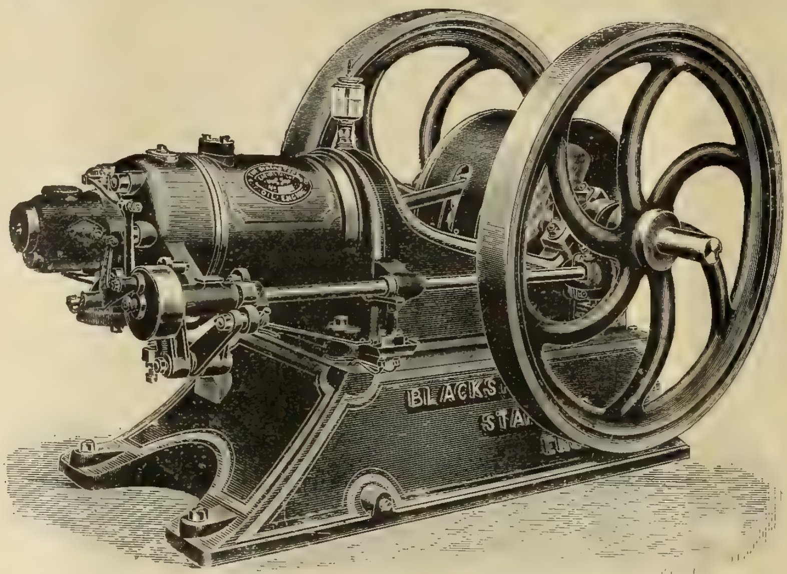
BLACKSTONE OIL ENGINES

ARE

Clean
Simple
Reliable
Economical
Self-contained
Well-made

HAVE NO

Fans
Sparks
Bad Odor
Electric Battery
Exterior Flame when operating



Blackstone Engine with Oil Tank in Base

CANADA FOUNDRY COMPANY, LIMITED
HEAD OFFICE AND WORKS, TORONTO, ONT.
DISTRICT OFFICES: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

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INTERCOLONIAL RAILWAY
CANADA'S FAMOUS TRAIN
THE MARITIME EXPRESS

Leaving Montreal 12 noon Fridays, carries the European mail and lands passengers, baggage, etc., at the steamer's side, Halifax, avoiding any extra transfer, the following Saturday.
When inward mail steamers at Halifax do not connect with the regular train, the Maritime Express, westbound, special train, with through sleeping and dining cars attached, for passengers, baggage and mail, will leave Halifax for Quebec and Montreal, connecting with trains for Ottawa, Toronto and all points west.

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TIES AND CULVERT STOCK
Quick Shipment. Low Prices.
Send Us Your Enquiries
FULLERTON LUMBER & SHINGLE CO., Vancouver, B.C.

STEAM RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1907.

In this table the minus mark (—) before figures in the net earnings column shows that there was a deficit in the operations of the line to the extent of the figures given. The numbers in brackets—thus (1)—after the name of a railway refer to notes on page 107.

Name of Railway	Mileage	Gross Earnings	Net Earnings	Proportion of earnings to working expenses	Earnings per train mile	Operating per train mile	Revenue Train Mileage	Mileage of non-Revenue Trains	Passengers Carried	Freight Carried
				p.c.	$ c	$ c	Miles	Miles		Tons
Alberta Ry. and Irrig. Co.(2)	123.41	$ 181,892.02	$ 45,648.55	74	2.87	2.15	63,194	3,820	23,762	98,894
Albert Southern Ry. (1)	19.00									
Algoma Cent. & Hudson Bay	121.57	263,166.43	44,119.17	83	6.96	5.79	37,772	13,009	15,983	237,198
Atlantic & Lake Superior (3)	100.00	68,886.32	—1,234.67	--101	0.82	0.84	83,500		16,635	32,373
Atlantic, Quebec & Western (4)										
Bay of Quinte (5)	123.67	288,087.75	117,209.73	59	1.25	0.74	229,770		108,775	336,873
Bedlington and Nelson	25.25	1,991.48	—12,312.50	—718	0.85	6.14	2,328	99	945	4,943
Beersville Coal & Ry. Co.	8.63	2,416.87	—1,978.51	--181			5,008		591	5,673
British Yukon	90.32	323,665.06	176,098.15	45	5.57	2.54	58,088	8,116	11,737	31,871
Brockville, Westport & N.W.	47.00	62,023.00	34,955.63	43	1.05	0.46	58,535		73,468	21,865
Bruce Mines and Algoma (7)	17.28									
Buctouche and Moncton (8)	35.20	24,659.99	4,838.59	80	1.22	0.99	20,032		17,837	237,575
Brandon, Sask. & Hudson Bay	76.18	6,308.58	—20,747.89	--428	1.22	5.26	5,123	3,421	1,995	10,433
Bessemer & Barry's Bay (6)	5.00	945.07	—4,603.89	—587						10,621
Canada Coals and Ry. Co.	15.50	38,448.48	16,175.95	57	1.82	1.05	21,072		13,250	96,391
Canada Southern (9)	811.19	8,458,678.39	—198,217.04	—102			3,831,135	173,769	1,095,471	6,087,427
Canadian Government Rys.										
Intercolonial	1,859.23	8,619,500.56	417,436.48	95	1.25	1.19	6,872,962	329,866	2,672,926	3,695,641
Prince Edward Island	287.50	288,336.76	—88,640.94	—130	0.86	1.12	334,014	43,600	303,437	92,347
Canadian Northern (10)	2,803.56	8,350,198.08	2,974,496 82	64	2.41	1.56	3,464,372	245,497	703,988	1,822,220
Canadian North. Ontario (11)	150.80	129,770.91	—12,065.19	—109	0.89	1.03	137,692	27,908	60,582	65,212
Canadian North. Quebec (12)	274.60	658,533.09	73,265.45	88	1.53	1.36	428,986		296,938	449,298
Canadian Pacific (13)	10,830 60	71,211,339.10	25,900,421.02	63	2.28	1.45	31,234,506	1,173,285	8,596,167	14,910,429
Cape Breton	31.00	8,144.89	—7,754.44	—195	0.42	0.82	19,406		7,933	3,394
Caraquet	88.28	50,315.63	—877.80	—101	1.12	1 14	44,650	1,250	11,074	25,099
Carillon and Grenville	13.00	3,030.67	—2,216.24	—173	0.67	1 45	2,860		5,148	104
Central Ontario	151.32	283,048.25	138,690.27	51	1 56	0.80	180,460		133,331	239,180
Crow's Nest Southern	60.99	134,570.36	21,529.74	84	2.18	1.83	61,515	5,212	17,212	178,367
Cumberland Ry. & Coal Co.	48.00	95,968.11	51,925.77	45			785,670		31,049	373,213
Dominion Atlantic (14)	324.24	778,571.82	280,586.39	72	1.35	0.86	574,076	4,498	334,805	362,497
Edmonton, Yuk. & Pacific (15)	4.50									
Elgin and Havelock	28.00	12,631.61	1,917.93	84					8,913	
Esquimalt & Nanaimo	78.00	458,176.12	152,934.45	66	3.29	2.19	139,125	8,952	176,039	183,115
Grand Trunk (16)	4,777.64	31,529,834.34	9,764,718.89	69	1.83	1.26	17,173,586	1,042,872	10,137,015	15,342,677
G.T.R. (Can. Atlantic) (16)	451.82	1,967,752.97	92,990.01	95	1.23	1.17	1,596,595	208,861	473,386	1,686,377
Gulf Shore (17)	17.79									
Halifax & South-Western (18)	391.96	323,367.86	32,338.44	89	1.31	1.02	245,442	12,715	177,355	179,011
Hampton & St. Martins	30.00	12,100.12	6,342.63	47	0 92	0.43	13,140		7,296	
Hereford	61.54	72,462.73	-24,864.80	---134	0.90	1.22	79,721	1,896	24,936	175,923
Hillcrest Ry. C. & C. Co. (19)	1.50									
International Ry. of N.B. (21)	29.00									
Inverness Ry. & Coal Co.	65.50	185,386.74	75,336.03	59	1.41	0.82	131,466	38,940	27,700	283,015
Irondale, Bancroft & Ottawa	49.00	31,685.56	497.12	98	1.04	1.02	30,452		10,951	34,130
Kaslo and Slocan	31.73	19,003.80	-18,394.34	—240	0.73	1.77	21,051		4,594	6,108
Kent Northern (22)	27.00	17,495.10	6,664.10	62					9,010	
Kettle River Valley (23)	3.86									
Kingston and Pembroke	133.80	233,831.04	62,414.14	73	1.40	1.03	165,904		44,708	124,826
Klondike Mines	33.50	36,040.59	—69,923.47	—269	2.64	7.11	13,640		2,655	2,314
Lake Erie & Detr. Riv. (24)	306.09	1,524,609.93	451,187.59	70	1.83	1 28	832,838	22,190	556,588	2,365,056
Liverpool and Milton	5.53	7,451.84	1,714.92	79			2,808		25,377	14,700
Lotbiniere and Megantic	32.53	34,161.56	7,977.48	76	1.86	1.42	18,360		11,894	55,712
Marmora Ry. & Min. Co. (26)	9.60									
Magnetawan River (25)	1.91									13,581
Manitoulin and North Shore	19.05	60,453.12	22,301.22	63	4.06	2 56	14,899	173	3,655	290,755
Massawippi Valley (27)	35.46	191,825.38	23,031.99	88	0 96	0.84	198,994	41,930	169,990	481,960
Montreal and Atlantic (28)	204.70	787,843.71	143,620.03	82	1.48	1.21	529,465	14,465	282,433	907,378
Montreal and Province Line	61 13	94,200.83	19,660.15	79	0 98	0 77	95,223	6,378	133,126	84,435
Montreal and Vermont Jct.	25 60	205,319.12	106,026.18	48	1 66	0.80	123,537	3,397	142,790	889,743
Morrissey, Fernie & Mich. (29)	10.85	90,250.60	20,036.87	78	3.65	2.84	24,669		217,201	473,558
Midland Ry. of Manitoba	83.56	10,084.67	—21,386.68	—312	1.40	4.39	7,163	6,109	2,093	120,450
Nelson & Fort Sheppard (30)	60.12	81,395.10	—46,525.10	—157	1.28	2.02	63,333		36,414	30,945
New Brunswick C. & Ry. Co.	65.00	40,502.19	—157.71	—100	0.78	0.78	51,542		14,297	40,358
New Brunswick & P.E.I.	37.50	30,859.02	7,113.13	77	0.61	0.47	50,008		18,798	29,259
New Brunswick Southern	84.30	40,745.04	—7,195.25	—117	0.68	0.80	59,300		12,585	27,183
Nosbonsing and Nipissing	6.75	34,279.20			1.20	1.20	13,500			26,966
Nova Scotia S. & C. Co.	16.37	5,624.33	—8,259.54	—245					7,408	8,578
New Westminster South. (31)	27.26	109,038.09	19,110.50	82	1.50	1.24	72,300	1,585	101,643	67,438
Orford Mountain	50.00	25,282.32	—4,787.97	—118	0.57	0.67	44,393	680	13,467	29,248
Ottawa and New York (32)	63.40	124,810.46	1,677.23	98	1.07	1.05	116,368	1,864	110,300	100,700
Phillipsburg Ry. & Quarry Co.	6.00	1,380.00	—4,330.14	—413						4,885
Pontiac and Renfrew (33)	4.25									

(*Continued on page* 107)

BALDWIN LOCOMOTIVE WORKS

The following locomotives are in stock and available for immediate delivery:—

FOR PASSENGER SERVICE:
One American type with cylinders 18″ x 24″, standard gauge.

FOR LOGGING SERVICE:
Two six-coupled double-ender locomotives with cylinders 15″ x 20″, standard gauge.

FOR SWITCHING SERVICE:
One four-coupled locomotive with cylinders 18″ x 24″, standard gauge.
One six-coupled locomotive with cylinders 18″ x 24″, standard gauge.
Two six-coupled locomotives with cylinders 21″ x 26″, standard gauge.

FOR FREIGHT SERVICE:
One ten-wheeled type with cylinders 18″ x 26″, standard gauge.
One ten-wheeled type with cylinders 18″ x 24″, standard gauge.
One consolidation type with cylinders 28″ x 32″, standard gauge.
Three consolidation type with cylinders 20″ x 24″, standard gauge.
One consolidation type with cylinders 19″ x 24″, standard gauge.

FOR SWITCHING AND CONTRACTORS' SERVICE:
Ten tank locomotives with cylinders 10″ x 16″, three feet gauge.
One six-coupled double-ender locomotive with cylinders 17″ x 20″, three feet gauge.

Full particulars and specifications of any of the above locomotives will be furnished on application.

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F. H. BRYDGES & SONS, Winnipeg, Man., Representatives.

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SOLID FORGED ROLLED WHEELS
Mounted on Axles and Fitted with Motor Gears for Electric Railway Service.

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ELLIPTIC AND COIL SPRINGS
LOCOMOTIVE TIRES

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Steam Railway Statistics for Year Ended June 30, 1907.—(*Continued from Page* 105)

Name of Railway	Mileage	Gross Earnings	Net Earnings	Proportion of earnings to working expenses	Earnings per train mile	Operating per train mile	Revenue Train Mileage	Mileage of non-Revenue Trains	Passengers Carried	Freight Carried
				p. c.	$ c	$ c	Miles	Miles		Tons
Princeton Br. Wash. Co. Ry..	5.24	$ 20,553.57	$ 15,057.58	26	2.05	0.54	9,999	136	19,132	86,736
Qu'Ap., L.Lake & Saskatch'n	253.96	....	....	......	......	....	....	....	....	....
Quebec Central............	222.00	922,444.46	303,561.05	67	1.56	1.04	590,857	168,278	280,374	580,876
Quebec & Lake St. John.....	279.61	601,619.68	205,904.16	65	1.65	1.08	363,630	....	325,629	344,820
Quebec Ry., L. & P. Co. (34).	37.00	185,493.78	55,195.00	70	0.64	0.44	289,743	....	1,235,260	84,897
Quebec, Mont. & Southern...	143.75	264,927.53	12,790.50	95	1.31	1.24	201,984	....	213,327	398,991
Red Mountain..............	13.52	38,195.72	2,994.04	92	2.97	2.74	12,854	254	14,507	93,064
Rutland and Noyan.........	3.89	15,710.44	6,822.71	56	2.10	1.09	7,473	646	91,527	239,152
Salisbury and Harvey.......	50.00	36,694.43	—1,060.49	—102	......	....	....	....	13,355	63,389
Schomberg and Aurora......	15.10	10,307.14	—950.99	—109	0.46	0.51	22,070	....	34,848	2,800
Stanstead, Shef'd & Chambly	46.23	82,447.26	19,639.75	76	0.93	0.70	88,632	13,235	182,305	891,726
St. Clair Tunnel............	2.25	311,809.00	165,441.49	46	......	....	....	....	....	....
St. John V. & R. du Loup (35)	6.00	....	....	......	......	....	....	....	....	....
St. Lawrence & Adiron'k (36)	61.91	323,088.85	127,448.60	60	1.49	0.90	216,142	4,593	342,870	530,358
Sydney and Louisburg.......	80.45	402,676.59	3,376.89	99	3.33	3.30	120,789	....	44,631	3,273,183
St. Louis and Richibucto.....	7.00	....	....	......	......	....	....	....	....	....
Temiscouata...............	120.93	172,195.15	36,549.99	78	1.11	0.87	154,392	....	62,197	113,845
Temiskaming & N. Ontario...	176.40	678,097.28	174,935.92	74	2.15	1.59	314,531	....	447,142	313,530
Thousand Islands	7.33	40,667.05	15,595.23	61	1.14	0.70	35,604	....	36,561	38,763
Toronto, Ham. & Buffalo (37)	121.03	853,986.31	315,780.10	63	2.18	1.37	390,918	4,050	416,626	998,475
Vancouver Copper Co. (38)...	12.00	....	....	......	......	....	....	....	....	....
Vancouver, Vic. & Eastern...	88.88	325,857.74	146,976.20	46	4.78	2.62	68,147	36,356	44,370	525,578
Vancouver, West. & Yukon...	19.96	91,957.47	28,818.78	68	2.16	1.48	42,504	....	95,256	57,132
Victoria and Sydney........	17.46	32,186.00	9,038.12	92	1.51	0.93	24,739	....	60,800	19,103
Victoria Ter. Ry. & Fer. Co..	19.88	11,825.83	—979.24	—72	1.30	1.63	7,825	....	66,393	27,843
Wabash Rd in Canada.......	....	2,538,011.10	607,423.21	76	1.56	1.19	1,619,228	465,154	509,823	1,314,791
Wellington Colliery Co.......	10.75	5,160.57	—29,240.27	—666	1.27	7.63	4,504	13,459	4,283	2,801
Wel. Col. Co. Ladysmith Ex..	17.88	37,333.87	....	100	0.99	0.99	37,334	....	1,345	455,733
York and Carleton..........	5.75	2,584.10	—1,196.65	—146	.. ..	....	6,356	....	4,100	17,027
Totals................	27,796.80	$146,738,214.68	$42,989,537 41				75,115,765	4,152,518	32,137,319	63,866,135

Notes to Steam Railway Statistics.

With the adoption of new schedules on July 1, 1906, there has been considerable alteration and improvement in the arrangement of the statistical tables showing the operation of the steam railways in Canada for the year ended June 30, 1907. In all essential regards the information given in the tables is identical with that collected by the Interstate Commerce Commission at Washington, D.C. In presenting the report J. L. Payne, Comptroller of Railway Statistics, says: "It was not to be expected, however, that these innovations could be readily and smoothly applied. Difficulties had to be met in many directions, but the mutual value of the new work, as between the Department and the railways themselves, was heartily recognized. This brought about a commendable spirit of co-operation. Therefore, while the returns are not perfect in all respects, they are nevertheless reasonably satisfactory under the circumstances."

The statistical table which we publish contains the same information which we have hitherto given, with the exceptions that the two columns heretofore showing the train and locomotive mileage respectively, have been altered, the first now showing the "revenue train mileage," and the second the "mileage of non-revenue trains." The notes which follow are compiled from the report just issued, such necessary information being added as will enable reference to be made to the notes and statistical table for the year ended June 30, 1906, which appeared in our issue of April, 1907, pages 225, 227 and 229.

(1) The Albert Southern Ry. is not being operated.

(2) The Alberta Ry. and Irrigation Co. was formerly known as the Alberta Ry. and Coal Co., and includes the St. Mary's River Valley Ry. It operates over 1.60 miles of the C.P.R. under trackage rights.

(3) The mileage of the Atlantic and Lake Superior Ry. is that of the old Baie des Chaleur Ry. only.

(4) The Atlantic, Quebec and Western Ry. is under construction.

(5) The Bay of Quinte Ry. operates 19 miles under trackage rights.

(6) The Bessemer and Barrys Bay Ry. is owned by the Mineral Range Iron Mining Co., and its traffic consists of iron ore. It connects with the Central Ontario Ry. near L'Amable, Ont.

(7) The Bruce Mines and Algoma Ry. is not being operated. It was placed in the hands of a receiver early in 1906.

(8) The Buctouche and Moncton Ry. is operated with the title of the Moncton and Buctouche Ry.

(9) The Canada Southern Ry. has 242.98 miles of second track, of which 92.51 miles was constructed during the year.

(10) The Canadian Northern Ry. mileage, earnings, etc., include those of the Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co., which was formerly operated by the C.P.R. under an agreement. It is now owned by the C.N.R.

(11) The Canadian Northern Ontario Ry. has trackage rights over 4 miles.

(12) The Canadian Northern Quebec Ry. includes the lines appearing in the returns for the year ended June 30, 1906, as the Chateauguay and Northern Ry., and the Great Northern Ry. of Canada.

(13) The C.P.R. has 125.20 miles of second track, of which 81.00 miles were completed during the year. Its mileage includes 992.20 miles of lines of proprietary companies; 3,168.50 miles of lines operated under lease; 168.50 miles of lines operated under contract; and 37 30 miles of trackage rights over other companies' lines.

(14) The Dominion Atlantic Ry. mileage includes 32 miles of line operated under lease and 14.51 miles of trackage rights.

(15) The earnings, etc., of the Edmonton, Yukon and Pacific Ry. are included in those of the Canadian Northern Ry.

(16) The G.T.R. has 667.42 miles of second track. Its mileage includes 161.30 miles of line operated under lease and 9.87 miles of trackage rights. The Canada Atlantic Ry. is operated as the Ottawa Division G.T.R.; its mileage includes 59.85 miles of trackage rights.

(17) The Gulf Shore Ry. is operated by the Caraquet Ry. and no separate statistics are given.

(18) The Halifax and South-Western Ry. mileage includes 2.30 miles of trackage rights.

(19) No figures are given respecting the traffic on the Hillcrest Coal and Coke Co.'s line.

(20) The Intercolonial Ry. has 44.18 miles of second track. It has trackage rights over 40.30 miles of other lines.

(21) The International Ry. of New Brunswick is under construction; the mileage given represents the track laid to the date of the report.

(22) The figures given for the Kent Northern Ry. include any traffic over the St. Louis and Richibucto Ry., which was not operated for some years.

(23) The Kettle River Valley Ry. did not make a report. This is the title of the Canadian portion of the lines operated as the Kettle Valley Lines. The lines operated extend from Grand Forks up the north fork of the Kettle River some 15 miles, and southerly to Republic, Wash., and extensions are being constructed northerly for a further 10 miles, and southerly from Republic to Seattle.

(24) The Lake Erie and Detroit River Ry. mileage includes the London and Port

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Stanley Ry., 23.66 miles, which it operates under lease, and 6.75 miles of trackage rights, of which 0.78 miles is second track.

(25) The Magnetawan River Ry. is operated by the G.T.R.

(26) The Marmora Ry. and Mining Co. is operated under lease by the Central Ontario Ry., and no separate statistics of its operation are given.

(27) The Massawippi Valley has 1.38 miles of second track. It is leased to the Boston and Maine Rd.

(28) The Montreal and Atlantic Ry. has 6.40 miles of second track. Its mileage includes 60.50 miles of leased lines.

(29) The Morrissey, Fernie and Michel Ry. mileage includes 5.00 miles of leased lines. It is owned by the Crow's Nest Coal Co.

(30) The Nelson and Fort Sheppard Ry. mileage includes 4.70 miles of line operated under trackage rights

(31) The New Westminster Southern Ry. operates over 1.48 miles of line under trackage agreements. It is part of the Great Northern Ry. (U.S.A.) system.

(32) The Ottawa and New York Ry. mileage includes 1.90 miles of trackage rights. It is part of the New York Central Rd. system.

(33) The Pontiac and Renfrew Ry. is not being operated. It extends from Wyman's Station on the old Pontiac Pacific Jct. Ry. (now part of the C.P.R.) to Bristol Iron Mines, Pontiac County, Que.

(34) The Quebec Ry., Light and Power Co. has 6.00 miles of second track. It also operates over two miles of line under contract.

(35) The St. John Valley and Riviere du Loup Ry. was projected from Fredericton to Woodstock, N.B., 66 miles, and six miles have been constructed. It has never been operated.

(36) The St. Lawrence and Adirondack Ry. mileage includes 13.30 miles operated under lease, and it has trackage rights over 8.70 miles. It is part of the New York Central Rd. system.

(37) The Toronto, Hamilton and Buffalo Ry. has 2.04 miles of second track. It has trackage rights over 4.70 miles of the lines of other companies.

(38) The Vancouver Copper Co.'s Ry. was formerly known as the Lenora, Mount Sicker Ry. It was not operated during the year.

Railway Finance, Meetings, etc.

The Acadia Coal Co. owns a line of railway about six miles long, extending from New Glasgow to Thorburn, N.S. Efforts are being made locally to have the Dominion Government take over the line and operate it as a branch of the Intercolonial Ry.

Baie des Chaleurs Ry.—Another suit has been instituted in the Exchequer Court, arising out of the settlement of claims. Galendez Bros., of London, Eng., and the Royal Trust Co., of Montreal, are seeking to arrive at the amount of the privileged claims. The total amount of the claims is about $1,000,000 and it is expected that it will take a considerable time to arrange them.

Bay of Quinte Ry.—We were advised in the middle of January that there were no negotiations pending for the acquisition of this line by the C.P.R., a report to which effect was mentioned in our Jan. issue.

Boston and Maine Rd.—A bill filed with the Massachusetts Legislature makes it unlawful for the New York, New Haven and Hartford Rd. Co. to control or attempt to control the B. and M. Rd. It directs the N.Y., N.H. and H. Rd. Co., if it now directly or indirectly owns or has financial interest in any stock of the B. and M. Rd., to terminate such ownership before July 1, 1909.

Canada Southern Ry.—An extension of five years has been arranged for the $14,000,000 first mortgage 5% bonds, due Jan. 1, the new rate of interest being 6%. The Michigan Central Rd., which leases the line, is responsible for the interest. Bonds were deposited with J. P. Morgan & Co., Dec. 21, for endorsement, the holders of more than 80% of the issue agreeing to the extension.

Chicago Great Western Ry.—This U.S. company, operating 1,476 miles of line, failed to make arrangements in London, Eng., in respect to some of its financial obligations, and receivers were appointed Jan. 8, A. B. Stickney, President, and C. H. F. Smith, St. Paul, Minn., being appointed. The stock and bonds of the company are largely held in Great Britain and press reports state that some negotiations have taken place with a view of the control of the line passing to the C.P.R.

Columbia and Western Ry.—An appeal was entered Jan. 8, by F. A. Heinze, against the recent decision of Judge Clement ordering a partition of the 800,000 acres of land grant of this railway. The applicant in the action is the C.P.R.

Dominion Atlantic Ry.—The Dominion Parliament is being asked at its current session to pass an act authorizing the issue of bonds in respect of additional lines to be constructed; to increase the number of directors; to provide for the retirement of the directors by rotation, and to authorize the company to contribute to the employes' sick and benefit fund.

Grand Trunk Ry.—The Supreme Court of the U.S. has refused to order up for review the case of the G.T. Western Ry. vs. W. H. Gray, which involves a claim against the company for $50,000 in connection with the receivership proceedings against the company. The case originated in Chicago, Ill.

Lake Superior Corporation.—The annual meeting was further adjourned from Jan. 6 to Jan. 21, pending the outcome of litigation respecting the right of the holders of certain stock, which was placed as security for loans to vote at the meeting. The case is before the New York courts, and the Vice-Chancellor suggested a settlement.

London and Port Stanley Ry.—Following are the officers and directors for the current year: President, Mayor Steveley; Vice-President, Alderman Booth; Secretary, S. Baker; other directors, A. W. White, and Aldermen Rose, Gerry, Greenlees, Saunders, Ferguson and Beattie. The directors have under consideration plans for carrying out various improvements on the company's property, and a meeting of the directors with the officials of the Pere Marquette Rd., which operates the line under lease, with respect to the same.

Michigan Central Rd.—A proposal is said to have been made by the Turbine Steamship Co., Toronto, to purchase or lease the M.C. Rd. line between Niagara on the Lake and Fort Erie, Ont., about 30 miles. The steamship company, it is stated, desire to convert the line into an electric railway. The reports respecting this matter appear to have originated in Buffalo, N.Y., about Jan. 16, but are not given much credence, especially as it is also reported that the New York Central and Hudson River Rd. interests have purchased the International Ry. of Buffalo. (See Electric Ry. Finance, Meetings, etc.)

Minneapolis, St. Paul and Sault Ste. Marie Ry.—A further issue of $3,500,000 of first consolidated 4% mortgage bonds, making a total issue of $41,605,000, has been listed on the New York Stock Exchange. The additional bonds were issued to cover the construction of 175 miles of line.

New Brunswick Coal and Ry. Co.—F. W. Morse, Vice-President and General Manager, and H. A. Woods, Assistant Chief Engineer G.T. Pacific Ry., made a trip of inspection over this company's line between Norton and Minto, N.B., Jan. 13. They were accompanied over the line by the Premier of New Brunswick, as representative of the Province which is operating the line through a commission. The object of the inspection, it is understood, was to arrange for a lease or sale of the line to the G. T. Pacific Ry. Co.

Northern Securities Co.—The annual report shows that during 1907 the company acquired by subscription 2,067 additional Crow's Nest Pass Coal Co.'s shares. The aggregate holdings of these shares by the Securities company are valued in the statement at $3,741,122, the increase in this item for the year being $516,750. The company since its distribution of its former holdings of Northern Pacific and Great Northern shares holds $2,858,594 of Chicago, Burlington & Quincy shares, and less than a thousand dollars of N.P., G.N. and C., B. and Q. joint bonds. The company received on its Crow's Nest Pass stock $150,841 in dividends. The net dividend income of the Securities company was $330,000, and, after the payment of the 5% dividend, the balance of income was applied on the payment of securities acquired during the year.

Pere Marquette Rd.—The various official acts necessary to the reorganization plan have been performed, and the arrangements for the election of officers, etc., of the new company are going forward. The plan of reorganization has been approved by Judge Lurton of the U.S. Circuit Court; the shareholders of the P.M. Rd. Co. have ratified the cancellation of the lease to the Cincinnati, Hamilton and Dayton Rd., and the arbitration agreement, and approved the consolidation of the Pere Marquette Rd. with the Pere Marquette Rd. of Indiana. Under the reorganization there will be no increase of the capital stock. The new first preferred after 1910 will be entitled and limited to a cumulative preferential dividend of 4%, and the second preferred will be entitled and limited to 4% preferential cumulative dividends, subject to prior payment of the first preferred dividends. The directors are: G. W. Perkins, H. F. Shoemaker, G. W. Young, W. R. Cross, E. H. Harriman, C. Steele, F. D. Underwood, G. A. Richardson, G. F. Baker, N. B. Ream, I. G. McCullough, W. B. Horn, A. Wardwell and T. W. Joyce, all of New York, and F. W. Stevens of Detroit. The meeting of shareholders to elect permanent directors will be held April 8.

An issue of $5,000,000 of five year 6% debentures to pay the floating indebtedness and Receiver's Certificates is being made, and F. W. Stevens, the General Solicitor, says these debentures will be taken up by about 1,500 of the stockholders, and not by any financial institution.

Quebec Central Ry.—Application will be made next session of the Quebec Legislature for an act authorizing the company to declare and pay interim dividends on its 7% income bonds, and to obtain a redistribution of the voting power among various classes of its stock and debenture holders; to change the date of its fiscal year from Dec. 31 to June 30; and to authorize it to acquire, build, maintain, operate and dispose of hotels and hotel property.

Gross earnings for Nov., $84,847.54; net earnings, $25,572.47; against $63,559.82 gross, and $22,183.64 net for Nov. 1906. Gross earnings for 11 months ended Nov. 30, $936,793.00; net earnings, $302,304.73; against $845,850.74 gross, and $314,095.38 net for same period, 1906.

Quebec Southern Ry.—South Shore Ry.—The report of the Registrar and Referee made in pursuance of the orders of reference

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dated Dec. 19, 1905, and June 1, 1906, recommending the payment forthwith of the claim of the East Richelieu Valley Ry. Co., with the privilege at Bailleur de Fonds, was duly filed at Ottawa, Dec. 3. The parties to the action were the Minister of Railways and Canals, plaintiff; Quebec Southern Ry., and South Shore Ry., defendants; La Banque de St. Hyacinthe, and the East Richelieu Valley Ry., intervenants, and the Rutland Rd. contesting the intervention of the E. R. V. Ry.

The report of the Registrar and Referee of the Exchequer Court approving of the accounts of G. C. Dessaulles, Receiver of the Q.S. Ry., and the S.S. Ry. balanced to Aug. 31, 1907, was filed at Ottawa Dec. 3.

Rutland Rd.—The report of the company for the year ended Dec. 31, 1907, partly estimated, shows: Earnings, $3,080,200; expenses, $2,227,200; net earnings, $853,000; other income, $47,600; gross income, $900,000; charges and taxes, $746,100; dividend, $135,900; surplus, $18,600; against a surplus of $13,900 for 1906.

Salisbury and Harvey Ry.—At the suit of the People's Trust Co. of Brooklyn, N.Y., this railway was placed in the hands of a receiver in the fall of 1907. On Jan. 3, the line was sold by order of the receiver, and was bid in by J. D. Newman, the company's Secretary, for $800. A. S. Swan, President of the S. and H. R. Co., is the receiver.

Temiscouata Ry.—Traffic receipts for Nov., 1907, $16,822.85.

Temiskaming and Northern Ontario Ry.—From the net earnings for 1907, the Commissioners have paid into the Ontario Treasury $235,000. This sum is sufficient to meet the interest on the loans raised in England for construction purposes.

Traffic receipts for Oct, 1907, $72,507.65; operating expenses, $63,989.77; net receipts, $8,517.88. Approximate receipts for Nov. and Dec., 1907, are $62,153.02; and $56,872.18.

Toronto, Hamilton and Buffalo Ry.—Approximate earnings for Dec., 1907, $69,426.26, against $67,734.19 for Dec., 1906.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—An agreement has been made between this company and the Victoria Terminal Ry. and Ferry Co., for the sale by the latter of its existing line between Cloverdale and Port Guichon, on the mainland of British Columbia, and its charter rights to construct a line from near Mud Bay, on the existing line southerly to the International boundary. A duplicate of this agreement has been deposited with the Provincial Secretary, and the approval of the Government of the same is being asked.

A meeting of the shareholders of the Vancouver, Westminster and Yukon Ry. was held Jan. 8, to approve of an agreement for the sale to the V.V. and E. Ry. and N. Co., of the V W. and Y. Ry. in Vancouver; from Vancouver to New Westminster and all lines connecting it with the bridge over the Fraser River at New Westminster, B.C.

Vancouver, Westminster and Yukon Ry.—See Vancouver, Victoria and Eastern Ry. and Navigation Co.

Victoria Terminal Ry. and Ferry Co.—See Vancouver, Victoria and Eastern Ry. and Navigation Co.

The Canadian Society of Civil Engineers has established a branch in Winnipeg. Col. H. N. Ruttan is Chairman, and Prof. E. Brydone-Jack, Secretary.

The differences between the C.N.R., and the engineers and firemen in its employ, are being investigated by a board of arbitration consisting of Prof. Adam Shortt, Chairman; F. H. Richardson, representing the company, and J. G. O'Donoghue on behalf of the men.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

Mussens Limited and the Canadian Fairbanks Co., Montreal, have issued large wall calendars with very distinct figures.

The Hart-Otis Car Co., Ltd., Montreal, has issued a handsome calendar, with illustrations showing the Hart convertible and Otis dump cars with the work they do.

The Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio, has issued a very artistic calendar, on which is a well-executed reproduction of Franz Charlet's painting, "First Days of Spring."

Mussens Limited, Montreal, have issued catalogue 16, for the Pulsometer steam pump, which is in extensive use in almost every branch of industry where steam pumps are employed.

The Montreal Steel Works, Ltd., declared a dividend of 1¾% on its preferred stock for the quarter ended Dec. 31, 1907; and a dividend of 4½% on the common stock (making 7% for the year), for 1907.

The Washburn Steel Castings and Coupler Co., Minneapolis, Minn., has issued a well-illustrated catalogue of various couplers and kindred devices manufactured at its works. Taylor & Arnold, Montreal, are the Canadian agents.

R. W. Hunt & Co., Inspecting and Consulting Engineers, Chicago, Ill., have established a branch office and chemical laboratory at St. Louis, Mo., under the charge of C. W. Gennett, Jr., formerly of the Baldwin Locomotive Works, and of the inspecting and testing department of the Southern Ry.

The Hamilton Steel and Iron Co., Ltd., Hamilton, Ont., has issued a circular to its shareholders, announcing that pursuant to an arrangement entered into with the directors, a new company, identical with the old one, has been formed with a capital of $5,000,000; the shareholders being entitled to shares in the new company pro rata with their previous holdings.

The Canadian Westinghouse Co., Hamilton, Ont., has issued circulars 1097, respecting Westinghouse types K and KG motors; 1107, dealing with Westinghouse Automatic Circuit-Breakers; 1147, describing and illustrating Westinghouse relays for alternating and direct current service, and a pamphlet descriptive of an electrical pipe-thawing apparatus.

The Washburn Steel Castings & Coupler Co. has issued its 1908 catalogue of couplers and other devices, which are fully described and handsomely illustrated, among the illustrations being one of Sir Thos. G. Shaughnessy's private car Killarney, which is equipped with Washburn flexible passenger couplers and Washburn friction draft rigging. The company has added to its line of goods a new car replacer. Taylor & Arnold, Montreal, are the Canadian agents.

The B. Greening Wire Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $750,000 and offices at Hamilton, Ont., to acquire the business of the B. Greening Wire Co., incorporated under the Ontario Companies Act in Feb., 1889, together with all the assets and liabilities of the company, and to continue and extend the same. The provisional directors are: S. O. Greening, R. H. Merriman, J. Maw, and H. B. Greening, of Hamilton, Ont.

MAINLY ABOUT PEOPLE.

G. Dent, for 18 years past foreman of the C.P.R. freight sheds at Port Arthur, Ont., died there recently.

Hon. Jas. Calder has been appointed acting Commissioner of Railways in the Saskatchewan Government.

Lady Shaughnessy was a passenger on the Kronprinzessin Cecilie, which sailed from New York for Great Britain, Jan. 21.

Frank Plummer, General Manager Canadian Lake and Ocean Navigation Co., left Toronto, Jan. 22, on a trip to Great Britain.

H. B. Ledyard, Chairman of the Board of Directors of the Michigan Central Rd., has been elected a director of the Pere Marquette Rd.

W. R. Jaffray, who died at Berlin, Ont., recently, was for some years from 1889 District Passenger Agent G.T.R., at St. Paul, Minn.

Hugh Sutherland, Executive Agent Canadian Northern Ry., Winnipeg, and Mrs. Sutherland, are spending the winter at Miami, Florida.

A. Price, General Superintendent C.P.R., Western Division, Calgary, Alta., was married to Miss M. Crawford at Winnipeg, Jan. 20.

Miss Van Horne returned to Montreal Jan. 11, at the conclusion of a visit to Rideau Hall, Ottawa, the guest of the Governor-General and Lady Grey.

W. Cross, who retired recently from the position of assistant to the Second Vice-President C.P.R., at Winnipeg, has gone to England for a visit.

G. M. Bosworth, Fourth Vice-President C.P.R., fell on the pavement near his residence, University St., Montreal, Jan. 6, and fractured his right arm.

A. Gobeil, I.S.O., Deputy Minister of Public Works, will, it is announced, shortly retire from that position, which he has filled since Jan. 1, 1891.

J. A. Macdonald, heretofore district agent Canadian Railway Accident Insurance Co., Toronto, has been transferred to Ottawa as Superintendent of Agencies.

T. Palos, leading machinist, was presented with a gold watch and chain by the G.T.R. shop employes at Palmerston, Ont., on his leaving that town on promotion.

J. H. Higginbottom, for over 40 years in the G.T.R. service, and latterly travelling auditor, died of pneumonia in the Victoria Hospital, London, Ont., Jan. 17.

W. W. Magee, who is interested in the ownership and management of coal carrying steamers trading to Hamilton, Ont., was married there Jan. 20, to Miss A. Dods

Sir Wm. Young, of London, Eng., a director of the G.T.R., visited Montreal and Toronto recently, on his way home from Cuba, where he has considerable interests.

F. L. Somerville, formerly Division Engineer G.T.R., Toronto, read a paper on grain transportation by water from the Northwest, at a meeting of the Engineers' Club, Toronto, Jan. 23.

Hugh Boyd, who died at Carberry, Man., Jan. 14, aged 89, was engaged for a number of years in railway contracting, and carried out several contracts on the C.P.R. east of Winnipeg.

C. McLaughten, Civil Engineer on the G.T.R. staff, Montreal, committed suicide by shooting himself at his residence, Ville St. Louis, Jan. 21. He had been despondent on account of a lengthened illness.

G. F. Evans, Vice-President and General Manager Maine Central Rd., and Vice-President Washington County Ry., died suddenly at Vanceboro, Me., while on a trip of inspection over the line, Jan. 10.

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Jas. Leitch, K.C., Chairman of the Ontario Railway and Municipal Board, was confined to his house for some days early in Jan., the result of an accident while boarding a street car on Church Street, Toronto.

A. B. Stickney, President Chicago and Great Western Rd., who has been appointed one of the receivers for that railway, was the first General Superintendent of the C.P.R. at Winnipeg, during a portion of 1881.

John Bibby, mate, Gravenhurst, Ont., has been awarded a silver medal by the Carnegie Hero Commission, in recognition of his having saved two men who were capsized in Muskoka Lake, during a storm, Oct. 31, 1905.

J. T. Shearer, who died at Westmount, Que., Jan. 7, was President of the Missisquoi Marble Co., which has recently entered into an agreement to purchase the Phillipsburg Ry. and Quarry Co.'s undertaking.

T. H. White, Chief Engineer of Construction, Mackenzie Mann & Co.'s Eastern lines, who has been granted extended leave of absence, has gone to Egypt, accompanied by Mrs. White, and expects to remain abroad for a year.

Lord Pirrie, who has recently been appointed Comptroller to the Viceregal Household in Ireland, by the Earl of Aberdeen, is a Canadian by birth, and Chairman of the shipbuilding firm of Harland and Wolff, Belfast, Ireland

W. T. McCulloch, heretofore Auditor of Freight Accounts, New York Central and Hudson River Rd., has been appointed acting Manager Central Railway Clearing House, Buffalo, N.Y., succeeding W. Nicholson, resigned.

Capt. T. Donnelly, of Kingston, Ont., who has not been in good health since last spring, left at the end of Dec. for Pinehurst, North Carolina, accompanied by Mrs. Donnelly, with the intention of spending the remainder of the winter there.

P. H. Smith, Secretary to the General Manager Quebec and Lake St. John Ry., Quebec, was married at Fredericton, N.B., Jan. 8, to Miss H. Crockett. Mr. Smith was presented with a cabinet of silver by the office staff prior to the event.

Professor E. B. Jack has been presented with a silver-mounted desk clock and calendar by the Nova Scotia Society of Engineers, on the occasion of his removal from that province to take charge of the engineering department of the University of Manitoba.

J. C. S. Bennett, official photographer C.P.R., left Montreal Jan. 4, for Guatemala, where he will take a series of photographs along the Guatemala Ry., of the company owning which, Sir Wm. C. Van Horne, Chairman of the C.P.R. Board, is President.

C. H. Mitchell has been elected President Toronto branch of the Canadian Society of Civil Engineers, and together with M. J. Haney, I. Simpson, and N. McLeod, will act as the Executive Committee for the current year. T. C. Irving, Jr., has been elected Secretary of the branch.

W. Wainwright, Fourth Vice-President G.T.R., and Second Vice-President G.T. Pacific Ry., and D'Arcy Tate, of the solicitors' department, have been visiting Victoria, B.C., to interview the British Columbia Government in connection with the G.T. Pacific Ry. construction in the province.

E. A. C. Pew, who died in Toronto Jan. 16, aged 74, was one of the original promoters of the Toronto, Hamilton and Buffalo Ry. He was also interested in the Niagara Central Ry., now the Niagara, St. Catharines and Toronto Ry., and in some lines in Western Canada now forming branches of the C.P.R.

W. Whyte, Second Vice-President C.P.R., and President of the Canadian Club at Winnipeg, has been appointed chairman of a central committee elected at a conference of Canadian clubs, for the purpose of acquiring the Quebec battlefields as a national park for a memorial to the heroes of France and Britain.

F. J. Brady, General Superintendent Lake Superior Division C.P.R., North Bay, Ont., has been granted two months' leave of absence on account of ill-health, and we were advised Jan. 24 that he would sail on Jan. 31 on the S.S. Sokoto for a trip to Nassau, Havana, Vera Cruz and the City of Mexico, expecting to reach Halifax again about Mar. 12.

Hon. G. A. Walkem, at one time Premier of British Columbia, and for some years subsequent to 1882 a judge of the Supreme Court of the Province, died at Victoria, B.C., Jan. 14. It is stated that it was owing to his efforts and perseverance while Premier that the negotiations for the construction of the C.P.R. through the province were brought to a satisfactory conclusion.

The Toronto City Council has made the following appointments for the current year: Representatives on the Harbor Commission, Aldermen Church and Bengough; director Credit Valley Ry., Controller Ward; director Toronto, Grey and Bruce Ry., Alderman Chisholm; director Ontario and Quebec Ry., Alderman Stewart; director Northern Division G.T.R., Alderman McBride.

Jas. Bain was presented with a gold locket by the members of the Quebec Transportation Club, Dec. 30, on the occasion of his leaving that city to take up his new position on the Halifax and Southwestern Ry., Bridgewater, N.S. On the same day he was presented with a gold watch and chain and an address by the employes of the Quebec and Lake St. John Ry., with which he had been connected in various capacities, latterly as Superintendent, for 21 years.

H. W. Walker, who has retired from active railway service, was born at Brantford, Ont., Feb. 12, 1839, his record of service being: 1854 to 1858, clerk Audit office Great Western Ry. of Canada, Hamilton, Ont.; 1858 to Feb., 1862, clerk Accountant's office, Detroit and Milwaukee Ry., Detroit, Mich.; Feb., 1862, to Jan., 1878, chief bookkeeper G.T.R., Montreal; Jan., 1878 to June, 1893, Accountant, same road; June, 1893, to April, 1896, Chief Accountant, same road; April, 1896, to Dec. 31, 1907, General Auditor, same road.

Wm. Cross, who has retired from active railway service, was born at Birkenhead, Cheshire, Eng., 1842, and entered railway service in Canada in 1863, his record being: 1863 to 1882, journeyman and foreman erecting shops, G.T.R., Montreal; 1882 to 1887, Master Mechanic Eastern Division C.P.R., Montreal; 1887 to April, 1900, Master Mechanic Western Division C.P.R., Winnipeg, Man.; April, 1900, to 1901, Consulting Mechanical Engineer same division, same road; 1901 to 1904, Engineer of Tests, same road, Montreal; 1904 to Dec. 31, 1907, Assistant to the Second Vice-President, C.P.R., Winnipeg.

W. H. Rosevear, who has retired from active railway service, was born at Wadebridge, Cornwall, Eng., Sept. 26, 1837, and came to Canada in April, 1854. His record of railway service is as follows: May, 1854, to 1857, mechanic in car works, Great Western Ry. of Canada, Hamilton, Ont.; 1857 to 1862, clerk mechanical department, same road; Feb., 1862, to Jan., 1890, mechanical accountant G.T.R., Montreal; Jan., 1890, to 1896, car accountant G.T.R.; 1896 to Dec. 31, 1907, General Car Accountant, same road. He was President of the Car Accountants' Association a few years ago.

N. J. Power, who has been appointed General Auditor, G.T.R., was born at Rochester, N.Y., May 19, 1843, and entered railway service 1859, since which his record has been: 1859 to 1867, clerk Freight Department Great Western Ry., Hamilton, Ont.; 1867 to 1873, chief bookkeeper Accountant's office, same road; 1873 to 1878, Accountant, same road; 1878 to 1882, General Auditor, same road; 1882 to 1886, Assistant Accountant G.T.R., which in 1882 took over the G.W.R.; 1886 to April, 1892, Secretary of Audit Board G.T.R., Montreal; April, 1892, to April, 1896, General Passenger Agent G.T.R.; April, 1896, to Jan. 1, 1907, Auditor of Disbursements, G.T.R.

R. K. Oliver, who has recently been appointed district Master Mechanic C.P.R. at White River, Ont., was born at Aylmer, Que., Jan. 19, 1866, and entered the company's service as apprentice in the shops at Carleton Jct., remaining there until 1891, his subsequent record being: 1891 to Sept., 1895, chargehand at Schrieber, Ont.; Sept., 1895, to April, 1896, locomotive foreman at Ottawa; April, 1896, to July, 1897, locomotive foreman at Cartier, Ont.; July, 1897, to Sept., 1898, locomotive foreman at Chapleau, Ont.; Sept., 1898, to July, 1900, locomotive foreman at Hochelaga, Que.; July, 1900, to Aug., 1904, locomotive foreman, Windsor St., Montreal; Aug., 1904, to Nov., 1907, general foreman McAdam Jct., N.B.

Geo. S. MacKinnon, who has been appointed Assistant Master Mechanic Canadian Northern Ry., Winnipeg, was born at Melbourne, Que., Sept. 16, 1854, and entered railway service 1872, his record being: 1872 to 1878, apprentice and foreman Connecticut and Passumpsic River Ry., now Boston and Maine Rd.; 1878 to 1885, engineer South-Eastern Ry., now part of C.P.R.; 1885 to 1889, locomotive foreman C.P.R., Farnham, Que.; 1889 to 1891, Assistant Master Mechanic C.P.R., Farnham; 1891 to 1894, Master Mechanic C.P.R. lines east of Farnham; 1894 to 1901, Master Mechanic Ontario and Quebec Division C.P.R., Toronto; 1901 to 1904, Master Mechanic Western Division C.P.R., Winnipeg, Man.; 1904 to 1907, locomotive foreman Canadian Northern Ry., Winnipeg.

H. Hyde, whose death was recently announced at Truro, N.S., was intimately connected with early transportation in Eastern Canada, before the advent of the locomotive. He established and maintained a stage coach line between Halifax and Pictou, and was awarded the contract for carrying the mails. Part of the stage coach line was stopped when the railway was completed between Truro and Halifax in 1858, and finally ceased to run on the opening of the extension to Pictou in 1869. A short time ago some round trip tickets, issued by the old Nova Scotia Ry., were discovered, the coupons reading: Truro to Halifax, Halifax to Windsor by Nova Scotia Ry., Windsor to St. John by steamboat, St. John to Point du Chene by European and North American Ry., Charlottetown to Pictou by boat, Pictou to Truro by Hyde's Royal Mail Stage Line. It is claimed that Mr. Hyde, in conjunction with F. N. Gisborn, laid the first submarine cable and transmitted the first submarine telegraph message. The cable was laid between Cape Tormentine, N.B., and Cape Traverse, P.E.I.

Grant Hall, who has been appointed Superintendent of Motive Power, C.P.R., Winnipeg, Man., was born at Montreal, Nov., 1863, and entered the G.T.R. shops, Montreal, in 1883, as an apprentice, since when his record has been: Mar. to July, 1888, Master Mechanic Intercolonial Ry., Sherbrooke, Que.; Aug., 1888, to June, 1889, locomotive foreman, C.P.R., Megantic, Que.; July, 1889, to Mar., 1890, locomotive foreman C.P.R., Brownville Jct., Me.; April, 1890, to Feb., 1893, locomotive foreman C.P.R., Windsor St., Mon-

(Continued on page 117.)

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ADVERTISING COPY must reach the publishers by the 10th of the month preceding the date of publication, if proof is required, or by the 15th if proof is not required.

TORONTO, CANADA, FEBRUARY, 1908

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Quebec Ry., Light and Power Co.—A circular was recently issued to the shareholders asking them to subscribe for a certain amount of 7% cumulative preferred stock in the treasury by Jan. 8. It was reported on the following day that the stock had been oversubscribed.

Reid-Newfoundland Co.—The annual return of the street car system was made to the St. John's, Nfld., City Council, Jan. 10. The receipts amounted to $31,948.38, or an average of about $87 a day. The number of passengers carried during the year was 638,967, the largest figure yet reached.

The Windsor, Essex and Lake Shore Rapid Ry. is constructing an electric locomotive at Kingsville, Ont., for hauling freight, etc., on its lines. The locomotive will be 34 ft. long and enclosed. The electrical equipment of four no. 132-A, 100 h.p., single phase motors with unit switch control and pantagraph pneumatic trolley, and combined automatic and straight brakes, is supplied by the Canadian Westinghouse Co., Ltd., Hamilton, Ont.

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MAINLY ABOUT PEOPLE.

(*Continued from page* 113)

treal; Mar., 1893, to Aug., 1898, general foreman Intercolonial Ry., Moncton, N.B.; Sept. to Dec., 1898, locomotive foreman C.P.R., Windsor St., Montreal; Jan., 1899, to Jan., 1901, general foreman C.P.R., McAdam Jct., N.B.; Feb. to June, 1901, general foreman, C.P.R., Winnipeg, Man.; July, 1901, to Nov., 1902, Master Mechanic C.P.R., Pacific Division, Revelstoke, B.C.; Dec., 1902, to Feb., 1904, Assistant Superintendent of Rolling Stock C.P.R., Montreal; Mar. to Sept., 1904, Assistant Superintendent of Motive Power C.P.R., Montreal; Oct., 1904, to Jan., 1908, Assistant Superintendent of Motive Power, C.P.R., Winnipeg, Man.

J. G. Sullivan, whose portrait appears on the first page of this issue, was born at Bushnell's Basin, N.Y., Jan. 11, 1863, and graduated C.E. at Cornell University, June, 1888. He entered railway service in 1888, his record being: July, 1888, to Mar., 1889, rodman, Great Northern Ry., U.S.; April, 1889, to Aug., 1890, rodman, instrumentman and assistant engineer Spokane Falls and Northern Ry.; Aug., 1890, to May, 1893, assistant engineer, Great Northern Ry. (U.S.) coast lines; July, 1893, to Feb., 1894, assistant engineer, Alberta Ry. and Coal Co.; July, 1894, to Oct., 1894, section foreman, Northern Pacific Ry.; Oct., 1894, to April, 1895, locating engineer, Butte, Anaconda and Pacific Ry.; April, 1895, to Dec., 1895, division engineer, Kaslo and Slocan Ry.; April, 1895, to Feb., 1901, locating and reconnaissance engineer and engineer in charge construction, Columbia and Western Ry.; Feb., 1901, to Sept., 1905, division engineer, construction department, Western Lines, C.P.R.; Sept., 1905, to Feb., 1907, assistant chief engineer Panama Canal, since when he has been manager of Construction C.P.R., Eastern Lines, Toronto. He was elected a member of the American Society of Civil Engineers in 1899, and is also a member of the Canadian Society of Civil Engineers.

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United States-Canadian Through Rates.

The following decision by the U.S. Interstate Commerce Commission was published Jan. 17: "A Canadian carrier having joint through rates from a point in the U.S. to points on its own line may not depart from these rates by the device of placing an agent at such a point in the U.S. with authority to sell tickets from the first station on its line north of the Canadian boundary to other points on its line in Canada at a rate of 1 cent a mile. They may be sold only to such persons as produce a certificate of the immigration agent of the Canadian Government. Besides being a device, tickets so limited to particular persons may operate as a discrimination, but in the absence of such joint through rates from a point in the U.S. to points on its own lines, this Commission has no jurisdiction over fares actually charged and collected for separate transportation between points in Canada."

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The G.T.R. pension fund committee consists of C. M. Hays, Second Vice-President and General Manager, Chairman; W. Wainwright, Fourth Vice-President, Vice-Chairman; W. H. Biggar, K.C., General Solicitor; W. G. Brownlee, General Transportation Manager.

J. D. McArthur Co., Ltd., railway and general contractors, incorporated under the Manitoba Companies Act, has been licensed under the act respecting extra-provincial companies, to carry on its business in Ontario, using therein a capital not exceeding $1,000,000. E. F. B. Johnston, Toronto, has been appointed the company's attorney.

TRANSPORTATION APPOINTMENTS.

Canadian Northern Ry.—J. R. Cameron, heretofore Superintendent district 1, Port Arthur, Ont., has been appointed General Superintendent. Office, Winnipeg. The position of General Superintendent has been vacant since the resignation of W. A. Brown, who has since been appointed Superintendent district 4, at Edmonton, Alberta.

A. Wilcox, heretofore Superintendent district 2, at Winnipeg, has been appointed Superintendent district 1, succeeding J. R. Cameron, promoted. Office, Port Arthur, Ont. No appointment has been made of a successor, and pending this the duties of Superintendent district 2 will be discharged by the General Superintendent.

Canadian Pacific Ry.—G. J. O'Dowd is reported to have been appointed city freight agent at Quebec.

The jurisdiction of J. R. Nelson, Superintendent district 3, Ontario Division, has been temporarily extended over district 2, owing to C. Murphy having been assigned to other duties for the present.

C. Murphy, Superintendent district 2, Ontario Division, has been appointed acting General Superintendent of the Lake Superior Division, relieving F. P. Brady, who has been granted leave of absence on account of ill-health.

Press reports from Winnipeg, to the effect that F. W. Peters, Assistant Freight Traffic Manager, has been appointed General Traffic Manager Western Lines, and which have been generally copied in our contemporaries, are incorrect. We have reason to believe that Mr. Peters is likely to receive another appointment in the near future, but that it will not be the one indicated in the reports referred to. We also think that W. B. Lanigan, now General Freight Agent at Winnipeg, will succeed him as Assistant Freight Traffic Manager.

W. Whyte, Second Vice-President, issued the following circular Jan. 1: "W. Cross, Assistant to the Second Vice-President, who has for a range of years extending from 1882 until now, in various capacities, rendered valuable services to this company, is to-day retiring from active service."

Grant Hall, heretofore Assistant Superintendent of Motive Power, Western Lines, has been appointed Superintendent of Motive Power for Western Lines. Office, Winnipeg.

G. H. Smith, heretofore Assistant General Freight Agent, Vancouver, has been appointed Assistant General Freight Agent, Central Division, succeeding W. H. Robertson, transferred. Office, Winnipeg.

C. L. White, heretofore Superintendent's Accountant, Montreal, has been transferred to the Western Lines as Travelling Accountant, reporting to J. Leslie, Auditor of Disbursements, Montreal. Press reports stated that Mr. White had been appointed Inspector of Timekeeping, Western Lines.

T. G. Armstrong has been appointed General Car Foreman, with jurisdiction over Winnipeg car shops and shop yards, vice W. C. Hodgson, promoted.

W. H. Robertson, heretofore Assistant General Freight Agent at Winnipeg, has been appointed Assistant General Freight Agent Pacific Division, succeeding G. H. Smith, transferred. Office, Vancouver, B.C.

W. C. Hodgson, heretofore General Car Foreman, Winnipeg, has been appointed Divisional Car Foreman, Pacific Division, succeeding W. Picken, deceased. Office, Vancouver, B.C.

A Vancouver, B.C., press dispatch of Jan. 28 said A. Purvis, heretofore chief clerk to the General Superintendent there, had been appointed Superintendent at Nelson, B.C. We were advised by telegraph by the management at Winnipeg, Jan. 29th, that there was absolutely no truth in this report.

D. H. Morse has been appointed Travelling Passenger Agent, C.P.R., Minneapolis, Sault Ste. Marie Ry. and Duluth, South Shore and Atlantic Ry. at Syracuse, N.Y., succeeding T. F. Madden. Office, 124 University Building, Syracuse, N.Y.

Central Vermont Ry.—W. Kennedy, heretofore Superintendent of Motive Power, has been appointed Superintendent of Motive Power and Car Department, Jas. Coleman, heretofore Master Car Builder, having resigned to take service with the G.T.R.

Chicago, Rock Island and Pacific Ry.—A. C. Turpin, heretofore Travelling Freight and Passenger Agent, Buffalo, having been assigned to other duties, the Canadian territory will in future be covered by the company's representatives at Detroit, Mich.; Buffalo, N.Y., and Boston, Mass. F. B. Gilmer, District Passenger Agent, Detroit, will cover that portion west of Guelph, Ont.; H. M. Brown, District Passenger Agent, Buffalo, will cover the central portion between Guelph and Prescott, Ont.; C. B. Sloat, New England Passenger Agent, and A. W. Gibbons, Travelling Passenger Agent, Boston, will cover the territory east of Prescott, including the Maritime Provinces.

Dominion Express Co.—H. E. Suckling, heretofore Secretary-Treasurer, Dominion Ex. Co., has been appointed Secretary. Office, Montreal. Mr. Suckling is also Assistant Treasurer, C.P.R. G. A. Newman, heretofore Assistant Treasurer, Dominion Ex. Co., has been appointed Treasurer. Office, Toronto.

Grand Trunk Ry.—The Second Vice-President and General Manager issued the following circular Dec. 30: "H. W. Walker, after more than 50 years of faithful and continuous service with the company, retires under the provisions of the company's pension scheme, Jan. 1, 1908."

N. J. Power, heretofore Auditor of Disbursements, has been appointed General Auditor, succeeding H. W. Walker, superannuated. Office, Montreal.

W. H. Ardley, heretofore Chief Clerk, has been appointed Auditor of Disbursements, succeeding N. J. Power, promoted. Office, Montreal.

J. M. Rosevear has been appointed chief clerk of the Audit Office, vice W. H. Ardley, promoted.

The Third Vice-President issued the following circulars, Dec 30: "W. H. Rosevear, General Car Accountant, after 53 years' faithful service, will retire on Jan. 1, 1908, under the provisions of the pension rules recently adopted by the company."

"Wm. McWood, Superintendent Car Department, after 52 years' faithful service, will retire on Jan. 1, 1908, under the provisions of the pension rules recently adopted by the company."

J. McCowan, heretofore chief clerk in the General Car Accountant's Department, has been appointed General Car Accountant, succeeding W. H. Rosevear, retired. Office, Montreal.

Jas. Coleman, heretofore Master Car Builder, Central Vermont Ry., has been appointed Superintendent Car Department, G.T.R., succeeding W. McWood, retired. Office, Montreal.

The jurisdiction of H. F. Coyle, Assistant Superintendent district 4, and Montreal Terminals, has been extended over district 5. Reports for district 5, heretofore made to the Assistant Superintendent at Belleville, Ont., will now be forwarded to the Assistant Superintendent at Montreal.

W. H. Farrell, heretofore acting Superintendent Toronto Terminals, has been appointed Superintendent Toronto Terminals. The office of acting Superintendent Toronto Terminals, to which Mr. Farrell was appointed in April, 1907, on the resignation of H. H. Brewer as Superintendent, has been abolished.

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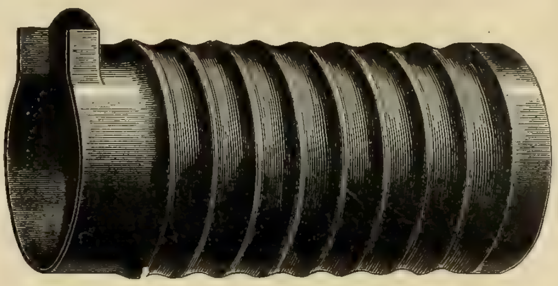

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Rev. W. P. Lyon is reported to have resigned the G.T.R.-Wabash joint agency at Black Rock, East Buffalo, Fort Erie and Bridgeburg, Ont., on his appointment as assistant rector of St. John's Church, Thorold, Ont.

G. W. Dickson, heretofore Master Mechanic Monon Route, Peru, Ind., is reported by U.S. papers to have been appointed to a similar position on the G.T.R.

Great Northern Ry. (U.S.).—G. J. Ryan, heretofore Division Freight Agent, St. Paul, Minn., has been appointed General Industrial Agent, succeeding M. J. Costello, promoted. Office, St. Paul, Minn.

M. J. Costello, heretofore General Industrial Agent, St. Paul, Minn., has been appointed Assistant Traffic Manager, succeeding H. M. Adams, resigned. Office, Seattle, Wash.

Intercolonial Ry.—C. F. Burns, heretofore acting Auditor of Disbursements, has been appointed Auditor of Disbursements, the appointment being effective from Dec. 1, 1907.

E. H. Allen, Claims Agent, is reported to have resigned to become Provincial Secretary of New Brunswick, and to contest York County in the pending elections.

J. H. Brassard, heretofore Chief Dispatcher at Riviere du Loup, Que., has been appointed Inspector of Transportation. His duty will be to travel on all parts of the railway. To supplement the Superintendent of Car Service, the superintendents of the several districts, and the dispatchers, and aid in the usual handling of the business. To prevent loss of time by trains at stations, whether such delay is caused by defective train dispatching, or by the slowness of train employes or of station employes in doing the work. To see that empty cars are supplied without unnecessary delay at the places where they are required. That cars, whether loaded or empty, which should be moved, are moved promptly. That cars are unloaded without delay. That the cars of other railways are promptly returned to them. That the hauling of empty cars is reduced as much as possible. That freight trains are fully loaded with cars. That the service in the yards at the various points is efficient and economical. To discharge such other duties as may from time to time be assigned to him. He will report from time to time to the General Manager, and will send copies of all such reports to the officials affected by them. All officials and employes are requested to co-operate with him and assist him so that an improved service may be secured.

John Stewart, heretofore locomotive engineer, has been appointed Travelling Inspector of Locomotives and Cars. His duty will be to travel on all parts of the railway. To see that the locomotives are distributed, used and handled in such a manner as to give the best service to the railway. To see that freight trains are loaded to the full capacity of the locomotives. To inspect the engine houses and repair shops and see that at each place the officials and employes use every means at their command, and their best efforts to repair and turn out the locomotives and cars without unnecessary delay. To give such instructions in each case which arises as he may consider necessary, acting promptly and using his own best judgment. To discharge such other duties as may from time to time be assigned to him. He will report from time to time to the General Manager; and will send to the Superintendent of Motive Power, to the Superintendents of districts, and to the Superintendent of Car Service copies of all such reports as affect their departments or districts. All officials and employes are requested to co-operate with him and assist him so that an improved service may be secured.

L. S. Blagden, senior train dispatcher, has been appointed acting Chief Dispatcher at Riviere du Loup, Que., vice J. H. Brassard, promoted.

G. Strubbe, heretofore assistant Ticket Agent, Montreal, has been appointed City Passenger and Ticket Agent there, succeeding J. J. McConniff.

Mackenzie, Mann & Co.'s Eastern Lines—T. H. White, Chief Engineer of Construction, has, at his own request, been granted extended leave of absence.

Napierville Junction Ry.—C. B. Hibbard, General Manager Quebec, Montreal and Southern Ry., is also acting as General Manager N.J.R., which is operated by the Delaware and Hudson Co., owning the Q.M. and S.R. See also Quebec, Montreal and Southern Ry.

New York Central and Hudson River Rd.—E. Van Etten, Vice President in charge of the Boston and Albany Rd., has resigned on his appointment as President of the Cuba Eastern Rd.

New York Central Lines.—A. S. Lyman has been appointed General Attorney, N.Y.C. and H.R.Rd., and of its leased and operated lines east of Buffalo, except the Boston and Albany Rd.

C. Brown has been appointed General Solicitor N.Y.C. and H.R.Rd. and of its leased and operated lines east of Buffalo, N.Y., and also of the Michigan Central Rd., and other lines west of Buffalo. He will have charge of legal matters relating to interstate commerce and traffic.

C. H. Paulding has been appointed Solicitor for the lines east of Buffalo, except the Boston and Albany Rd. He will have charge of legislative matters.

H. Russell has been appointed General Counsel of the Michigan Central Rd. Office, Detroit, Mich.

G. H. Haselton, heretofore Division Superintendent of Motive Power at West Albany, N.Y., has been appointed Assistant Superintendent of Motive Power. Office, New York city.

Under a further reorganization of the freight traffic department of the New York Central lines, East, the titles of General Eastern Freight Agent of the New York Central and the West Shore, and of the Merchants' Dispatch, have been abolished. With this change the Merchants' Dispatch will handle all the freight traffic of the New York Central and the West Shore, moving over the Lake Shore and the Michigan Central, including what is now known as the Red Line, White Line, West Shore Line, Blue Line and North Shore Dispatch. R. J. Menzies, with office at 350 Broadway, has been appointed New York District Agent. The fast freight line traffic of the New York Central and West Shore moving over the Nickel Plate, Grand Trunk, Wabash and Pere Marquette, to and from the New York district, will be in charge of L. M. Allen, with title of Commercial Agent, his office continuing at 350 Broadway. These last named fast freight lines are the Nickel Plate Line, Grand Trunk Dispatch, Hoosac Tunnel Line, Pere Marquette-New York Central Line, and Pere Marquette-West Shore Line. Mr. Allen will also have charge of the New York Central and West Shore freight between the New York district and points in Canada, New England and western and northern New York.—Railway World.

Pere Marquette Rd.—J. L. Cramer, heretofore Comptroller of the P.M.R. and Cincinnati, Hamilton and Dayton Rd., has been appointed Vice-President and Comptroller of the reorganized P.M. Rd.

Quebec, Montreal and Southern Ry.—W. J. Mullen, General Traffic Manager Delaware and Hudson Co., has also been appointed General Traffic Manager Q.M. and S.R., and of the Napierville Junction Ry.

D. I. Roberts, General Canadian Freight and Passenger Agent Delaware and Hudson Co., has also been appointed General Freight and Passenger Agent Q.M. and S.R., and of the Napierville Junction Ry. Office, 160 St. James St., Montreal.

Transcontinental Ry. Commission.—A. N. McGillivray has been appointed assistant District Engineer at Kenora, Ont., succeeding A. F. Heaman, resigned. This is the position to which C. O. Foss, Assistant District Engineer at St. John, N.B., was originally reported to have been appointed.

Canadian Ticket Agents' Association.

The executive committee met in Toronto Jan. 28, those present being W. Jackson, Chairman; W. Bunton, R. J. Craig, J. F. Dolan, J. P. Hanley, W. McIlroy, M. McNamara, Lt.-Col. Piche, and E. de la Hooke, Secretary. C. R. Coleman, of Truro, N.S., President, was unable to attend. There were also present by invitation W. E. Rispin, C. E. Horning, F. W. Churchill, and Acton Burrows.

It was decided that the next annual meeting, etc., of the Association be held at Detroit, Mich., on Oct. 6, 7 and 8. Messrs. Jackson, Rispin, and the Secretary were appointed a committee to make the necessary hotel arrangements.

W. Jackson was appointed to represent the Association at the American Association of General Passenger and Ticket Agents in Toronto in September. G. T. Bell, General Passenger Agent G.T.R., is the Vice-President of the American Association this year, and is in line for the Presidency next year.

Examination of Motormen.

The Secretary of the Ontario Railway and Municipal Board has issued the following circular to electric railway companies: I have the honor to call your attention to the fact that the presentment of the grand jury at the December assizes held at Hamilton contains the following clause: 'The grand jury consider that electric railway companies should be more careful in selecting their motormen and that a longer service in training should be insisted upon before these men are put in such responsible positions where the life of the travelling public is in their care.'

"I have the honor by direction of the Board to remind you that the Board will, of course, be obliged to withdraw its approval of the appointment of any examiner of motormen who fails in any way to discharge his duties to the satisfaction of the Board, and in such a way as to insure the safety of the public using the highway and the cars. In case of criminal negligence examiners would probably be subject to criminal prosecution."

The C.P.R. Empress Hotel, Victoria, B.C., of which we published an illustration in our April, 1907, issue, was opened Jan. 22.

The Dominion Express Co.'s Pension Department rules have been amended, making the minimum monthly allowance $20.00.

The G.T.R. carmen have applied to the Dominion Labor Department for the appointment of a board of arbitration under the Lemieux Act, to investigate the question of wages, etc.

The C.N.R. station and divisional headquarters at North Battleford, Sask., were destroyed by fire Jan. 23, and the death of H. Lang, an employe, caused thereby. The damage to buildings, etc., is estimated at $5,000.

D. B. Hanna, Third Vice-President Canadian Northern Ry., has been appointed one of the receivers of the Chicago & Milwaukee Electric Ry. Co., the other receivers being W. I. Osborne, Vice-President Central Trust Co., Chicago, and A. C. Frost, President Chicago & Milwaukee Electric Ry. Co. A considerable portion of the company's bond issue is held in Canada.

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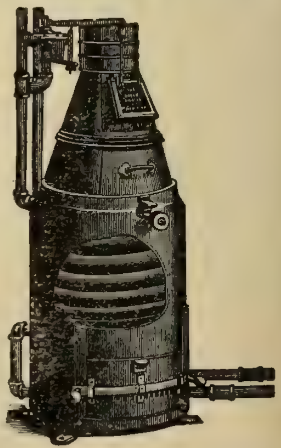

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Projects, Construction and Betterments.

Brantford and Hamilton Ry.—A car service has been placed in operation between Hamilton and Ancaster, Ont., a two-hour service being maintained. When the line is completed through to Brantford, it is said that a car will be run in each direction every hour. (Jan., pg. 47).

British Columbia Electric Ry.—A delegation representing the Point Grey Improvement Association waited on the B.C. Government recently to urge the construction of an electric line to connect it with Vancouver. Some eighteen months ago the B.C.E.R. made a survey for such a line and asked for a subsidy of 30 acres of land in the district per mile of line. This is opposed by the owners, who have recently purchased land from the Government, which owns 35,000 acres there. (Jan., pg. 47).

Calgary, Alta.—A proposition for the construction of an electric line has been submitted to the city council by Alexander & Budd. A franchise for 15 years is asked, but it is proposed that a stipulation be inserted in any agreement made providing that the city may purchase the line at a valuation at any time during the currency of the franchise. British capital is said to be interested. (Dec., 1907, pg. 927).

Fort William, Ont.—Application will be made next session of the Ontario Legislature by the Fort William City Council for an act authorizing it among other things to construct, equip, operate and maintain an electric street railway over such streets as the council, with the assent of the ratepayers, may from time to time determine, and to authorize the issue of debentures to cover the cost of such railway, such debentures to be paid off within 30 years.

The Port Arthur City Council, at a meeting held Jan. 22, passed a resolution stating that it was not in the interests of the two places that there should be two separate street railways.

Grand Valley Ry.—Contracts for grading, masonry and timber work on the renewals and construction work of this railway have been let, and it is announced that further contracts will be placed in the spring for rails, rolling stock and general equipment. The system to be adopted has not yet been conclusively decided upon, but it is anticipated that the single phase principle will be adopted and estimates are being prepared for power and equipment on this basis. The interurban cars to be used will be 52 ft. long, and the city cars 23 ft. The plans of the company include the following renewals and extensions: the line from Brantford to Galt to be relaid with 80-lb. rails; the Brantford St. Ry. to be reconstructed, and seven miles of additional track to be laid; the reconstruction of the Woodstock, Thames Valley and Ingersoll Ry.; an extension of the Brantford-Galt line; and from Brantford through Mount Pleasant, Boston, Waterford, Bloomsburg and Simcoe to Port Dover; from Brantford westward through Mount Vernon, Burford, Cathcart, and Eastwood to Woodstock; from Woodstock, through Embro and Beachville to Ingersoll, and from Ingersoll through Dorchester to London. Altogether, 42 miles of track will be reconstructed, and about 90 miles of new track built. On the Port Dover extension a steel trestle bridge about 1,200 ft. long will be constructed. (July, 1907, pg. 505, and Oct., 1907, pg. 759).

Guelph Radial Ry.—Application will be made next session of the Ontario Legislature for an act extending the time for the completion of the lines authorized to be constructed, and to give power to the company to increase its capital stock. D. Guthrie, Guelph, is solicitor for the company, which is owned by the city. (Jan., 1907, pg. 45).

The International Power Co. has been incorporated under the British Columbia Companies Act, with a capital of $250,000, for the purpose of developing water-powers and supplying electric energy for industrial purposes; constructing, equipping, operating and maintaining electric, cable, or other tramways or street railways for the conveyance of passengers and freight; constructing telegraph and telephone systems or lines, and for other purposes in connection therewith.

London Street Ry.—Negotiations are proceeding between the company and the city council with a view of arriving at a definite agreement as to the extension of lines to be constructed. (Jan., pg. 47).

Montreal and Southern Counties Ry.—The Montreal City Council, Jan. 14, passed a resolution asking the Minister of Railways, in deciding upon the right of the company to operate within the city limits, to provide that the company shall be subject and liable to the conditions of a by-law to be adopted by the city prior to the construction of the lines. A meeting of the shareholders for organization and other purposes was held in Montreal, Jan. 30. H. G. Elliott is acting as Secretary-Treasurer. (Jan., pg. 47).

Mount McKay and Kakabeka Falls Ry.—Application will be made next session of the Ontario Legislature for an act defining and confirming the location of the projected line of railway, and declaring that it has power to construct the line on either the north or south side of the Kaministikwia River, or as to part on the north side and as to the balance on the south side; authorizing the company to use steam power for propelling cars and other vehicles during the construction of its line of railway and other works; approving and confirming by-law 514 of the city of Fort William, and the agreement made between the city and the company, dated July 17, 1907, whereby the company is given the right to construct and operate its railway on certain streets in the city; approving and confirming a by-law passed by the township of Neebing respecting aid to the company by guaranteeing the bonds of the company to an amount equal to $10,000 a mile for every mile of railway constructed by the company or its assigns within the municipality during five years from the date of the passing of the by-law, and by exempting the property of the company from all municipal taxation, except school taxes, for a period of 21 years commencing 1908; extending the time for the completion of the company's railway until April 30, 1912, and for such other incidental rights, powers and authorities as may be necessary. (Nov., 1907, pg. 841).

Nipissing Central Electric Ry.—A report from Ottawa states that it is expected that the company will let a contract in May or June for the projected electric railway between Cobalt and New Liskeard, Ont. J. Fitzpatrick, Ottawa, is President, and F. H. Latchford, formerly Commissioner of Public Works in the Ontario Government, is interested. (See Cobalt District, Jan., pg. 47).

North Midland Ry.—The Ontario Legislature will be asked next session for an act extending the time for the commencement and completion of certain parts of the projected railway. T. H. Luscombe, London, Ont., is solicitor for the applicants, who are also interested in the South-Western Traction Co.

A meeting of shareholders has been called to be held at the offices, 169 Dundas St., London, Feb. 3, for the purpose of electing directors; passing and confirming by-laws; issuing paid-up stock to the promoters of the company; making a contract for the construction of the line, and arranging for the payment of the contractor in bonds and paid-up stock.

Press reports state that a contract has been let to A. E. Welch, London, Ont., for the construction of 35 miles of line to connect London and Stratford, and that the line will run via Bryanstown, Devizes, Cherry Hill, Wellburn, St. Mary's, and probably Avonton. It has also power to construct lines to serve Clinton, Mitchell, Exeter and other points in Huron, Perth and Middlesex counties. (Dec., 1907, pg. 927).

Ontario West Shore Electric Ry.—The by-law guaranteeing $150,000 of the bonds of the O. and W.S.E.Ry. Co. was passed by the ratepayers of Goderich, Ont., Jan. 6. A press despatch states that this vote brings up the guarantee of the company's bonds by the local municipalities to a total of $400,000. The proposal of the company is to construct an electric railway between Goderich and Kincardine. (Dec., 1907, pg. 927).

Quebec and Saguenay Ry.—A syndicate of British and French capitalists is reported to have undertaken the construction of this projected railway, from the terminus of the Quebec Ry., Light and Power Co.'s line to Murray Bay, Que. Other reports stated that the syndicate would construct an independent line into Quebec running nearer the residential district along the river front; and that the six electrical companies operating in Quebec were to be brought under one management and control. We are advised that no proposition having reference to any amalgamation of the Quebec Ry., Light and Power Co. with any other company, such as is indicated, has been made. (Aug., 1907, pg. 603).

Quebec Ry., Light and Power Co.—It is intended to construct a short switch at Mastai Junction for the accommodation of the traffic to the insane asylum, and it is also reported that a short branch will be constructed to connect the Kent House with the new dam at the Natural Steps. (Nov., 1907, pg. 841).

St. Vital, Man.—The by-law authorizing the municipality to construct and operate an electric railway, was carried at the recent election by a majority of 22 votes. (Jan., pg. 47).

South-Western Traction Co.—The Ontario Legislature will be asked next session for an act extending the time for the completion of certain parts of the line authorized to be constructed. (Dec., 1907, pg. 929).

Western Central Ry.—Application will be made next session of the Ontario Legislature for an act extending the time for the commencement and completion of the lines authorized to be constructed. A. T. Drummond, Toronto, is acting for the applicants. (Sept., 1906, pg. 549).

Windsor, Chatham and London Ry.—Application is being made at the current session of the Dominion Parliament for an act extending the time for the construction of this projected railway. M. Wilson, Chatham, Ont., is solicitor for the applicants. (June, 1906, pg. 345).

Windsor, Essex and Lake Shore Rapid Ry.—We are advised that the line is in operation between Windsor and Kingsville, Ont., and the grading between Kingsville and Leamington has been completed. Tracklaying is in progress, and it was expected that this work would be finished by Jan. 30. The electric locomotive ordered from the Canadian Westinghouse Co., Hamilton, Ont., we were advised Jan. 7, was expected to be delivered a few days thereafter. (Oct., 1907, pg. 761).

Winnipeg, Selkirk and Lake Winnipeg Ry.—The electrical equipment of this line is expected to be installed early in the current year, the power-house having been erected, and other preliminary work completed. At present the line, which extends from Winnipeg to Selkirk, Man., is being operated by steam power. (July, 1906, pg. 415).

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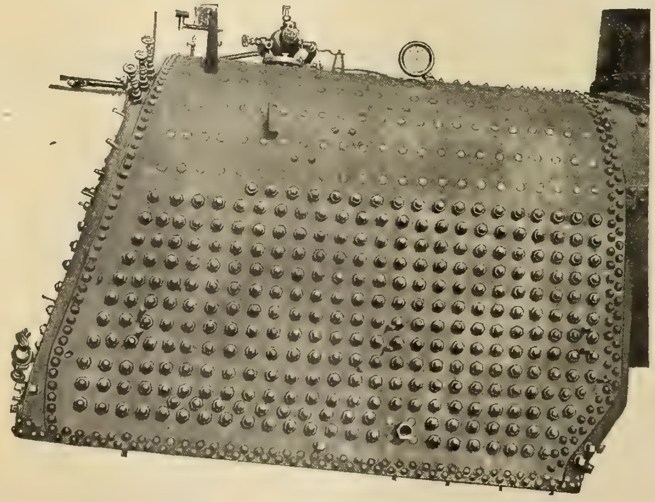

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Electric Railway Notes.

The Windsor and Tecumseh Ry. has been ordered to sell 10 tickets for 25 cents to children using its cars in going to and from school.

The Hamilton St. Ry. car barns, at the corner of Locke and Herkimer streets, Hamilton, Ont., were destroyed by fire Jan. 20. Four cars were burned. The damage is placed at $30,000.

S. F. Kilgore, Toronto, President Huron and Ontario Ry., died in London, Eng., Jan. 23, aged 46. He had been in England for some months in connection with the financing of the construction of the railway.

Jas. Deadey, roadmaster Mimico Division Toronto and York Radial Ry., had his left leg broken while returning to Toronto on a special tool car, Jan. 23, after superintending the clearing of a snow blockade on the line.

The Winnipeg Board of Control has directed the City Solicitor to endeavor to recover from the Winnipeg Electric Ry. fines aggregating over $12,000, imposed by the City Engineer for failure to run cars according to an approved schedule.

The Recorder of Montreal has imposed a fine of $25 upon the Montreal Street Co. for not having extended its lines to Villeray, Que., according to an alleged agreement. The Recorder said the company was liable to a fine of $25 a day from Aug. 17, 1907.

The Grand Valley Ry., Brantford, Ont., is reported to be in the market for several 23-ft. city cars, and a number of 52-ft. cars for suburban lines. It is also stated that the company is considering the desirability of placing an order for an electric locomotive.

N. M. Cantin, who, amongst other projects in connection with St. Joseph, Ont., originated the scheme of the St. Joseph and Stratford Radial Ry., to connect St. Joseph with Stratford, was arrested recently on charges of perjury and of obtaining money and shares in connection with the St. Joseph Land Improvement, Building and Manufacturing Co., Ltd.

The Ontario Railway and Municipal Board issued an interim order, Jan. 11, requiring the Toronto Ry. to run its cars over the section of line between Humberside and Keele St., Toronto Jct., which was recently relaid by the Toronto Jct. town council, the speed not to exceed 6 miles an hour over that portion considered by the Toronto Ry. to be unsafe. It is understood that the railway company is running the cars as directed, and has postponed the question of appeal as to the jurisdiction of the Board, pending the decision of the Board on the hearing of the case.

It is understood that several amendments to the act constituting the Ontario Railway and Municipal Board will be considered during the session of the Legislature for the current year. Additional powers will be conferred upon the Board enabling it to decide upon the highways new street car lines shall be built in case of dispute between municipalities and companies, and to deal with a number of small matters in regard to which there is at present considerable differences between the companies and the municipalities, and in regard to which the Board's powers are somewhat indefinite.

A deputation from the Canadian Street Ry. Association, consisting of E. A. Evans, General Manager Quebec Railway, Light and Power Co., President of the Association; R. J. Fleming, General Manager Toronto Ry.; A. H. Royce, President Toronto Suburban Ry., and Counsel of the Association; G. E. Waller, Dominion Power and Transmission Co.; D. T. McIntosh, Niagara, St. Catharines and Toronto Ry.; and Acton Burrows, Managing Director of THE RAILWAY AND MARINE WORLD, Secretary-Treasurer of the Association, had a conference with the Ontario Railway and Municipal Board Jan. 21, with reference to the annual returns required to be made to the Board by electric railway companies. Several of the changes and modifications which were suggested by the deputation were adopted by the Board, and others were held over for further consideration.

The Ontario Court of Appeal delivered judgment Jan. 22 on the appeal by the City of Toronto from a decision of the Ontario Railway and Municipal Board of April 23, 1907, dismissing the application of the City for an order requiring the Toronto Ry. Co. to desist from the alleged violation of its agreement with the City by throwing snow, ice, and other material upon the streets, without the permission of the City Engineer, and requiring the Company to run each of its cars conveying passengers to the end of its route. The appeal was confined to the application made by the City to the Board to compel the Railway Company to cease using an electrical snow-sweeper without the leave of the City Engineer. The Board held that the company were entitled to use the sweeper without leave, and the Court agrees with that view. Appeal dismissed with costs. No order made upon other questions.

Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Subscriptions were invited in Great Britain to Jan. 24, for an issue of £100,000 of preferred ordinary shares at £1 each, present shareholders having a preference in the allotment.

Gross earnings for Nov., $180,851; operating expenses, $84,054; renewal fund, $10,750; net earnings, $86,047; approximate income from investments, $11,036; net income, $97,083, against $125,978, gross earnings; $60,565, operating expenses; $9,638, renewal fund; $55,775, net earnings; $9,536, approximate income from investments; and $65,311 net income for Nov., 1906. Gross earnings for five months ended Nov. 30, 1907, $814,290; net income, $407,476; against $579,315 gross, and $290,308 net for same period 1906.

Halifax Electric Tramway Co.—Traffic receipts for Dec., $14,383.55, against $13,751.41 for Dec., 1906.

Hamilton, Grimsby and Beamsville Electric Ry.—The annual meeting of shareholders was announced to be held at Hamilton, Jan. 27. This line is one of the suburban electric railways controlled by the Dominion Power and Traction Co., Hamilton.

International Traction Co.—A Buffalo, N.Y., press report, Jan. 17, stated that the Andrews-Vanderbilt Trolley Syndicate had acquired the property and franchises of the International Traction Co., of Buffalo, to add to the New York Central Lines system of electric railways. The Buffalo Co. has a capital of $16,320,500, besides having a funded debt of $10,378,000. The total cost of the road and equipment to date is $30,500,000. It operates 158 miles of tracks and covers the cities of Buffalo, Lockport, Niagara Falls, and Tonawanda, and includes the Niagara Falls Park and River Ry. in Canada and the bridges connecting the scenic points in Ontario and the State of New York, in and around the Niagara Gorge. In this connection reference may also be made to a press report that the Turbine Steamship Co. of Toronto had made an offer to the Michigan Central Rd., to purchase or lease its line from Niagara-on-the-Lake to Fort Erie, Ont., for the purpose of converting it into an electric line. If the purchase of the International Traction Co. be made by N.Y.C. interests, it is hardly likely that the M.C. Rd., which is controlled by N.Y.C. Rd. interests, would sell or lease any of its lines for electrification by an opposing interest. It would be more likely that the M.C. Rd. to Niagara-on-the-Lake would be electrified by N.Y.C. interests, which would then control the entire system of electric railways along both sides of the Niagara River.

London Street Ry.—At the annual meeting of shareholders to be held in London, Ont., Feb. 5, a resolution will be submitted authorizing the issue of debentures to an amount not exceeding $750,000.

The question of the purchase of the line and franchises of the company by the city council is again under consideration. The franchise does not expire until 1925, and it is stated that the principal shareholders will not sell unless the city is willing to pay a premium of about 50% on the par value of the stock.

Montreal Street Ry.—A special general meeting was held at Montreal Jan. 29, for the purpose of authorizing the directors to issue about $1,000,000 of new stock at a premium of 25%, and to make an issue of debenture bonds. The debentures will be 14-year debenture bonds, bearing interest at 4½%. It is reported that these bonds have been sold in London, Eng., at 92⅞.

Passenger earnings for Dec., $291,681.43; miscellaneous, $2,958.74; total earnings, $294,640.17; operating expenses, $192,310.26; net earnings, $102,329.91; city percentage on earnings, $11,275.50; interest on bonds and loans, $16,719.31; contingent for renewals, $14,584.22; rent leased lines, $339.93; surplus, $59,410.95; against, $262,334.37, passenger earnings; $4,618.96, miscellaneous; $266,953.33, total earnings; $185,571.22, operating expenses; $81,382.11, net earnings; $9,189.93, city percentage on earnings; $16,615.07, interest on bonds and loans; $13,316.95, contingent for renewals; no rent, leased lines; and $42,260.16 surplus for Dec., 1906. Total earnings for three months ended Dec. 31, $902,723.02; operating expenses, $539,522.94; city percentage on earnings, $32,337.70; standing charges, $95,625.17; surplus, $235,337.21; against $812,036.02 total earnings; $516,433.00 operating expenses; $27,866.58 city percentage on earnings; $91,141.65 standing charges; and $176,594.79, surplus for same period, 1906.

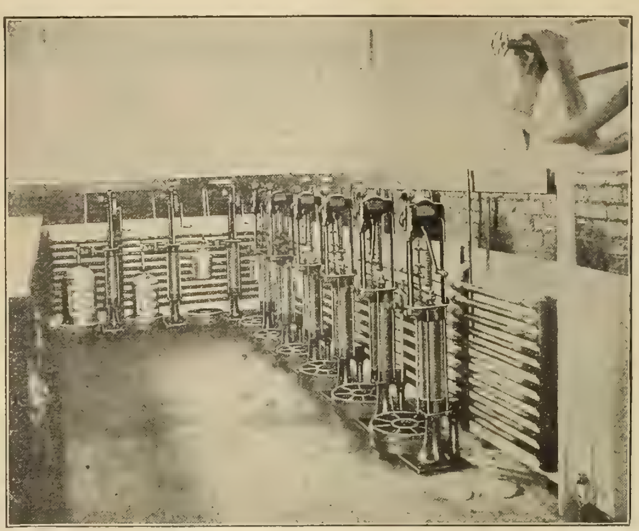
Ottawa Electric Ry.—Total receipts for 1907 were $574,278, against $525,747 for 1906. A dividend of 12% for the year has been declared.

Port Arthur Electric Railway.—An offer has been made to the Port Arthur City Council by the Fort William City Council of $75,000 for that portion of the Port Arthur electric railway within the city of Fort William, Ont., together with all the franchises connected therewith and one-half of the rolling stock and equipment. As an alternative arbitration is suggested. The matter is under consideration.

Windsor, Essex and Lake Shore Rapid Ry.—A deed of mortgage to the Union Trust Co., Toronto, dated Oct. 22, 1907, securing an issue of bonds, not exceeding $20,000 a mile, and not exceeding on the whole $2,500,000, was, on Jan. 8, deposited with the Secretary of State at Ottawa.

Winnipeg Electric Ry.—Reports are current in Winnipeg that negotiations are in progress for the sale to the city council of the whole of the undertaking of the Winnipeg Electric Ry., including electric street railway, electric lighting and power systems. It is hardly likely that there is anything in this. The shareholders are not considered to be desirous of selling and the present state of the city's finances is not such as to make it possible for the city to find the money that would be required for such a purpose.

Total car earnings for 1907, $861,857.42. The percentage paid to the city was $43,092.87, being 5% of the receipts.



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ELECTRIC RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1907.

The following abbreviations are used in the names of railways—E., electric; E. R., electric railway; E. S. R., electric street railway; Ry., railway; S. R., street railway. The minus mark (—) in the column for net earnings shows that there was a deficit in the operations of the line to the extent of the figures given. The numbers in brackets—thus (1)—after the name of a railway refer to notes below.

Name of Railway	Mil'ge	Gross Earnings	Net Earnings	Proportion of earnings to working expenses	Earnings per car mile	Operating per car mile	Freight Mileage	Total Car Mileage	Locomotive Mileage	Passengers Carried	Freight Carried
				p.c.	cts.	cts.					Tons
Berlin and Waterloo S. R. (1)	3.12	$ 33,285.24	$ 8,217.84	75.3	40.0	0.3	....	81,800	....	733,864	....
Leased Berlin & Brid'port Ry. (1)	2.40	3,285.31	1,873.87	....	42.6	....	....	....	....	....	....
Brantford S. R. (2)	7.00	31,294.10	6,743.97	78.4	25.8	0.5	....	120,867	....	402,090	....
British Columbia E. R. (3)	59.13	914,157.11	380,633.46	58.3	29.7	0.2	86,350	3,076,787	....	16,281,766	31,162
Cape Breton Electric Co. (4)	12.73	88,772.21	26,876.85	69.7	0.3	0.2	....	314,079	....	1,563,316	....
Cornwall S. R. (5)	6.00	25,813.92	5,211.65	79.8	....	....	13,828	207,840	....	375,064	....
Egerton Tramway Co. (6)	8.10	45,672.66	10,724.07	56.6	0.3	0.2	7,065	130,259	....	888,722	....
Galt, Preston & Hespeler S. R. (7)	9.00	107,093.36	42,453.39	51.0	49.0	25.1	17,452	216,922	....	594,815	84,871
Leased Preston & Berlin E.R. (7)	10.75	....	....	....	....	....	....	....	....	....	....
Grand Valley Ry. (8)	21.00	41,064.27	9,367.75	77.1	23.6	....	....	173,764	....	219,038	....
Guelph Radial Ry. (9)	6.00	28,509.65	8,340.62	29.2	15.6	11.0	2,500	182,500	....	616,046	12,600
Halifax E. Tramway Co. (10)	12.13	168,781.41	55,139.89	67.3	22.1	14.8	....	760,599	....	3,783,801	....
Hamilton and Dundas S. R. (11)	7.25	41,922.23	19,497.21	53.4	46.3	24.7	....	90,550	....	407,880	1,650
Hamilton, Grimsby & Beam.E.R.(12)	23.00	85,256.75	24,094.99	71.7	....	21.9	27,900	278,625	....	432,997	21,600
Hamilton Radial E. R. (13)	24.75	106,364.94	38,916.25	63.4	28.2	17.8	....	377,006	....	941,767	3,600
Hamilton S. R. (14)	22.00	281,830.96	63,271.29	77.5	19.9	15.4	....	1,414,941	....	7,201,908	....
Hull Electric Co. (15)	14.50	101,904.60	15,304.30	84.9	....	....	17,195	566,589	....	1,026,939	15,559
International Transit Co. (16)	3.30	43,743.74	10,439.55	76.1	15.2	11.6	....	286,696	....	1,076,417	....
Kingston, Ports. & Cataraqui E.R.(17)	8.00	30,692.87	2,744.07	91.0	....	0.1	....	199,680	....	847,559	....
Levis County Ry. (18)	10.25	56,986.61	—1,931.77	103.	17.6	18.2	5,725	323,632	....	1,477,005	....
London S. R. (19)	26.46	218,853.96	45,757.33	79.0	15.2	12.3	....	1,400,931	....	6,420,807	....
Montreal Park & Island Ry. (20)	22.41	250,164.13	73,446.01	70.6	29.2	20.9	11,011	854,125	....	3,176,587	....
Montreal S. R. (21)	67.04	3,401,589.81	1,332,464.58	60.8	22.8	14.1	....	14,606,712	....	83,747,540	....
Montreal Terminal Ry. (22)	18.23	95,526.09	—15,159.11	115.	13.1	20.8	21,823	531,301	....	923,139	86,633
Nelson Tramway Co. (23)	3.00	7,966.00	—6,257.11	178.	19.0	0.3	....	40,800	....	155,136	....
Niagara Falls P. & R. Ry. (24)	11.75	155,320.67	68,396.33	55.9	41.4	23.2	2,769	374,417	....	1,414,021	....
Niagara, St. Cath. & Tor. Ry. (25)	26.50	155,889.50	50,478.32	66.9	30.7	20.8	242,785	506,418	242,785	920,048	92,381
Niagara Falls, Wesley Pk.&Cl.Ry.(26)	4.50	34,055.09	17,165.36	50.3	....	....	....	184,180	....	755,585	....
Oshawa Ry. (27)	8.02	63,031.50	15,261.13	75.7	1.2	0.9	15,471	51,982	51,982	166,000	101,931
Ottawa E. R. (28)	22.87	544,451.90	198,798.22	63.4	....	....	....	3,009,280	....	12,048,531	....
Peterborough Radial Ry. (29)	6.00	33,597.46	5,934.26	82.3	....	0.1	....	264,802	....	722,497	....
Port Arthur S. R. (30)	9.00	69,181.29	24,414.53	64.7	33.4	....	....	207,209	....	1,442,991	....
Pt.Dalhousie, St.C.& Tho.E.S.R.(31)	8.17	19,602.70	6,561.11	33.4	....	10.5	....	123,903	....	392,554	....
Quebec Ry., Light and Power Co.											
Citadel Division (32)	17.22	233,770.33	67,626.50	71.0	18.2	12.8	....	1,280,603	6,408	5,515,128	....
Montmorency Division (32)	25.00	127,362.25	46,822.98	63.2	49.6	0.3	....	256,510	....	1,114,456	....
Sandwich, Wind. & Amherst.Ry.(33)	34.63	135,517.39	67,565.77	52.2	24.0	....	....	540,390	....	2,607,122	....
Sarnia S. R. (34)	7.00	36,919.54	5,739.88	54.2	....	....	....	136,396	....	621,678	....
Sherbrooke S. R. (35)	7.00	32,899.25	....	....	....	....	....	285,451	....	811,501	....
Southwestern Traction Co. (36)	18.25	29,189.01	—642.30	....	....	....	....	143,148	....	172,199	....
St. John Ry. (37)	12.50	140,230.22	8,076.18	94.2	17.4	16.4	....	802,542	....	3,120,031	....
St. Stephen S. R. (38)	3.00	28,466.00	—3,922.17	113.	15.4	14.6	....	183,960	....	583,614	....
St. Thomas S. R. (39)	7.50	20,063.14	1,759.54	75.4	....	....	....	338,040	....	551,280	....
Sydney & Glace Bay Ry. (40)	18.80	113,613.71	49,173.63	56.7	3.7	20.9	....	307,782	....	2,143,000	....
Toronto Ry. (41)	51.05	3,271,192.97	1,576,160.23	51.8	....	....	....	14,328,942	....	81,290,847	....
Toronto Suburban Ry. (42)	9.81	36,257.03	8,407.14	76.8	....	13.2	....	187,975	....	774,366	....
Toronto & York Radial Ry. (43)	50.44	241,385.77	80,412.92	66.6	24.6	16.4	64,963	978,673	....	2,708,782	....
Winnipeg E. S. R. (44)	34.33	863,990.20	437,347.28	49.3	30.1	14.9	....	2,864,704	....	20,224,239	....
Woodstock, T.V. & I. E. R. (45)	11.50	26,766.43	12,376.38	53.7	14.2	....	....	114,816	....	397,937	....
Yarmouth S. R. (46)	2.13	12,620.07	2,044.41	83.8	28.0	23.4	....	45,046	....	206,794	....
Totals	814.52	$12,635,905.35	$4,898,653.58	....	....	....	536,837	53,361,227	301,121	273,999,404	479,731

Notes to Electric Railway Statistics.

(1) The Berlin and Waterloo S.R. has a capital of $97,674.39, made up of common stock paid up, $30,950; bonds sold, $30,000; other sources, $36,724.39. Cost of railway and rolling stock, $102,189.09. The Berlin and Bridgeport Ry. has a capital of $31,557.37, made up of common stock paid up, $17,000; from other sources, $14,559.37. Cost of railway and rolling stock, $31,557.37.

The returns of the Berlin and Bridgeport E. Ry. are for three months only, prior to which period it was being operated under lease by the Berlin and Waterloo S.R. The B. and W.S.R. was acquired under arbitration proceedings by the Berlin Town Council.

(2) The Brantford St. Ry. has a total capital of $325,000, made up of common stock paid up, $200,000; bonds sold, $125,000. The cost of the railway and equipment is not ascertainable.

(3) The British Columbia E.R. has a total capital of $8,472,599.76, made up of ordinary shares, $1,946,666.00; preference shares, $2,920,000; bonds, $3,318,479; other sources, $287,454.76; and there is a floating debt of $287,454.76. The cost of lines and equipment is not given by the present company, it being the result of five amalgamations.

(4) The Cape Breton Electric Co. has a capital of $2,099,000, made up of ordinary shares, $1,000,000; preference shares, $234,000; bonds sold, $865,000; floating debt, $10,000 at 6%. Cost of railway and rolling stock, $2,145,112.19.

(5) The Cornwall S.R. has a total capital of $200,000, made up one-half of common and one-half of preferred stock; and its railway and rolling stock is reported to have cost $201,204.22.

(6) The Egerton Tramway Co. has a total capital of $425,000, made up of ordinary shares, $250,000; bonds sold, $175,000. It has a floating debt of $6,000 at 6%. Cost of railway and equipment was $430,000.

(7) The Galt, Preston and Hespeler Ry., has a total paid-up capital of $31,310, entirely of common stock, and a floating debt of $100,000 at 5%. The cost of its line and rolling stock is returned at $114,169.14. The Galt, Preston

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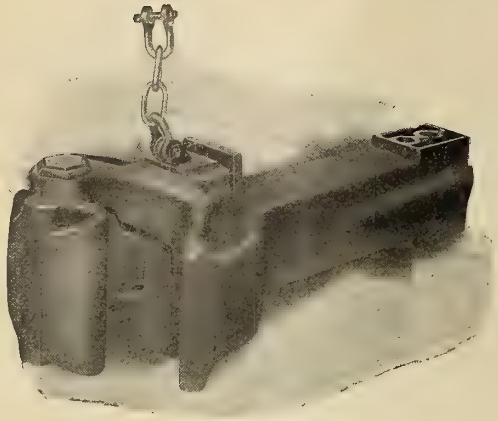

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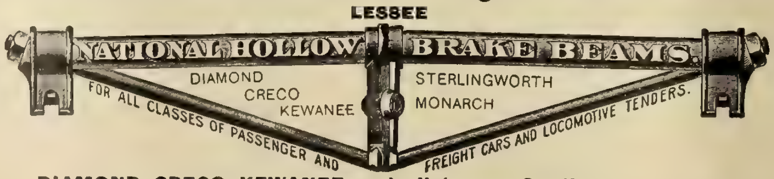
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and Hespeler Ry. earnings, etc., include those of the Preston and Berlin Ry. which is operated under lease. The P. and B.R. is reported to have a paid-up capital of $1,000, and its line and rolling stock are reported to have cost $423,814.11.

(8) The Grand Valley Ry. has a total paid-up capital of $1,150,000, made up of $700,000 common stock and $450,000 of bonds. The cost of its line and rolling stock is not given.

(9) The Guelph Radial Ry. has a paid-up capital of $108,000, entirely of common stock, and this amount is given as the cost of its line and rolling stock.

(10) The Halifax Electric Tramway has a paid-up capital of $800,000, made up of $500,000 common stock and $300,000 of bonds. It has a floating debt of $85,000 at 6%; and its line and rolling stock cost $740,000.

(11) The Hamilton and Dundas S.R. has a paid-up capital of $450,000, made up of $100,000 common stock; $100,000 bonds; other sources, $350,000. Its line and rolling stock are reported to have cost $345,647.36.

(12) The Hamilton, Grimsby and Beamsville E.R. has a paid-up capital of $413,000, made up of common stock, $235,000; bonds, $150,000; municipal aid, $28,000. Its line and equipment is reported to have cost $326,790.

(13) The Hamilton Radial E.R. has a paid-up capital of $2,271,150, made up of common stock, $36,250; preferred stock, $74,900; bonds, $160,000; other capital, $2,000,000. The cost of the railway and its rolling stock is reported to have been $1,269,043.08.

(14) The Hamilton St. Ry. has a capital of $705,000, made up of common stock, $205,000; bonds, $500,000; and there is a floating debt of $113,756.30. The cost of the line and rolling stock was $711,534.08.

(15) The Hull Electric Co. has a capital of $292,000, made up of common stock; and the cost of the line and rolling stock is given as $632,563.30.

(16) The International Transit Co. (Sault Ste. Marie, Ont.) has a paid-up capital of $450,000, consisting of $150,000 of common stock and $300,000 of bonds. It has a floating debt of $138,366.03, and its line and equipment are reported to have cost $318,804.15.

(17) The Kingston, Portsmouth and Cataraqui E.R. has a paid-up capital of $183,100, consisting of $40,000 of common stock, $43,100 of preferred stock, and $100,000 of bonds. The cost of the line and rolling stock is placed at $200,000.

(18) The Levis County Ry. was reported to have been sold at Sheriff's sale for $50,000. No stock has been issued.

(19) The London S.R. has a paid-up capital of $1,040,024, made up of common stock $540,024; bonds, $500,000. There is a floating debt of $33,901 at 6%. Cost of railway and rolling stock, $1,078,197.36.

(20) The Montreal Park and Island Ry. has a paid-up capital of $2,060,900, made up of common stock, $720,900; preferred stock, $315,000, and $1,025,000 of bonds. It has a floating debt of $1,095,060.73 at 6%. The cost of the line and its equipment was reported to have been $2,319,839.04. It has been acquired by the Montreal St. Ry. Co.

(21) The Montreal S.R. has a paid-up capital of $10,850,233, made up of common stock, $8,376,900; and bonds, $2,473,333; it has a floating debt of $3,282,645.05 at 6%. The cost of the line and rolling stock was returned at $11,078,858.58.

(22) The Montreal Terminal Ry. has a paid-up capital of $1,613,000, made up of common stock, $1,000,000; bonds, $613,000; and it has a floating debt of $43,624.01. Cost of line and rolling stock, $1,656,509.43.

(23) The Nelson Tramway has a paid-up capital of $285,000, entirely of common stock, and the cost of the railway and equipment is reported to have been $96,394.81.

(24) The Niagara Falls Park and River Ry. has a capital of $1,200,000, of which $600,000 is in common stock and $600,000 in bonds. The line and rolling stock cost $1,153,563.97.

(25) The Niagara, St. Catharines and Toronto Ry. has a paid-up capital of $2,013,400, made up of common stock, $925,000; bonds, $910,000; Dominion Government subsidy, $38,400; municipal subsidies, $140,000. The line and rolling stock cost $1,239,490.09.

(26) The Niagara Falls, Wesley Park and Clifton Ry. has a paid-up capital of $150,000, of which $50,000 is ordinary stock, and $100,000 is bonds sold. The line was purchased for $100,000 by the Niagara, St. Catharines and Toronto Ry.

(27) The Oshawa Ry. has a paid-up capital of $155,862.16, made up of common stock, $40,000; bonds, $88,452.16; Dominion Government subsidy, $22,400; municipal aid, $5,000. There is a floating debt of $10,288.35 at 6%. The cost of the railway and rolling stock was $208,181.01.

(28) The Ottawa E.R. has a paid-up capital of $1,498,200, made up of common stock, $998,200; bonds, $500,000; and there is a floating debt of $190,000 at 5½%. The cost of the line and equipment was $1,961,488.59.

(29) The Peterborough Radial Ry. has a paid-up capital of $150,000, of which $100,000 is common stock and $50,000 bonds; and it has a floating indebtedness of $26,315.74 at 5%. The cost of the line and rolling stock was $176,731.34.

(30) The Port Arthur S.R. has a total capital of $167,000, entirely of bonds issued by the city council. The line and rolling stock cost $187,106.68.

(31) The Port Dalhousie, St. Catharines and Thorold E.S.R. has a paid-up capital of $137,500, made up of common stock, $77,500; bonds, $60,000. The line was purchased for $90,000 by the Niagara, St. Catharines and Toronto Ry.

(32) The Quebec Ry., Light and Power Co. has a capital of $5,855,945.50, made up of common stock, $2,500,000; preferred stock, $453,000; bonds, $2,500,000; Dominion Government subsidies, $96,000; Quebec Government subsidies, $306,945.50. It has a floating debt of $137,660.98 at 7%. The cost of the line and its rolling stock for steam and electric operation is given as $1,163,786.70.

(33) The Sandwich, Windsor and Amherstburg Ry. statistics includes all figures relating to mileage and operation of the Windsor and Tecumseh Electric Ry. The company's paid-up capital is $697,000, made up of common stock, $297,000; bonds, $400,000. There is a floating debt of $282,281.91 at 6%. The cost of the line and rolling stock is returned at $1,041,338.13.

(34) The Sarnia S.R. has a paid-up capital of $132,180, made up of common stock, $75,280; bonds, $56,980. Cost of line and rolling stock, $149,751.88.

(35) The Sherbrooke S.R. has a paid-up capital of $350,000, of which $200,000 is common stock and $150,000 bonds; it has a floating indebtedness of $7,800 at 5%. The line and rolling stock cost $350,000.

(36) The South-Western Traction Co. has a paid-up capital of $1,105,226, consisting of common stock, $437,726; bonds, $667,500. The line is still under construction.

(37) The St. John (N.B.) Ry. has a paid-up capital of $1,500,000, consisting of common stock, $800,000; bonds, $700,000. There is a floating debt of $215,649.36 at 6½%. The cost of the line and rolling stock is not given, a note being appended that the line was acquired by the present company at a mortgage sale.

(38) The St. Stephen (N.B.) S.R. has a paid-up capital of $200,000, consisting of one-half of common stock and the remaining half of bonds. There is a floating debt of $13,766.80. Cost of line and rolling stock, $200,000.

(39) The St. Thomas (Ont.) S.R. was taken over by the city under mortgage. It has a capital of $50,000 bonds issued by the city.

(40) The Sydney and Glace Bay Ry. has a capital of $900,000, consisting of $500,000 of common stock and $400,000 of bonds. The cost of the line and rolling stock is returned at $963,585.39.

(41) The Toronto Ry. has a paid-up capital of $11,598,913.33, made up of common stock, $7,985,540; bonds, $3,613,373.33. There is also a floating debt of $500,235.15 at 4½%. The cost of the line and rolling stock was $13,104,631.94.

(42) The Toronto Suburban Ry. has a paid-up capital of $80,000, entirely of common stock, and there is a floating debt of $100,000 at 6%. The line and rolling stock cost $132,113.38.

(43) The Toronto and York Radial Ry. has a paid-up capital of $3,000,000, made up of $2,000,000 of common stock and $1,000,000 of bonds. It has a floating debt of $887.093.49 at 6%. The cost of the lines and rolling stock was $3,206,738.40.

(44) The Winnipeg E.S.R. has a paid-up capital of $9,000,000, made up of $4,500,000 of common stock, and $5,000,000 of bonds. The cost of the lines and rolling stock were $2,577,527.63.

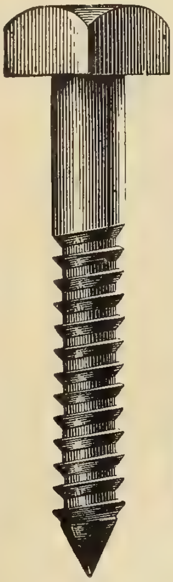
(45) The Woodstock, Thames Valley and Ingersoll E.R. has a paid-up capital of $332,500, made up of $100,000 of common stock, $100,000 of preferred stock, and $113,800 of bonds sold. It has a floating debt of $1,125.24. The cost of the line and rolling stock was not reported.

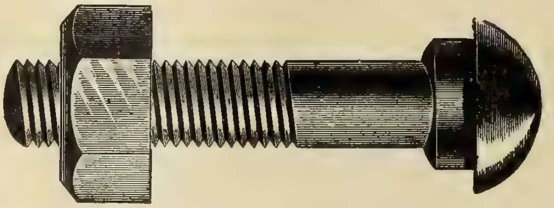
(46) The Yarmouth (N.S.) S.R. has a paid-up capital of $67,200, made up of $54,500 of common stock and $12,700 of bonds. The cost of the line and rolling stock was reported to have been $63,555.74.

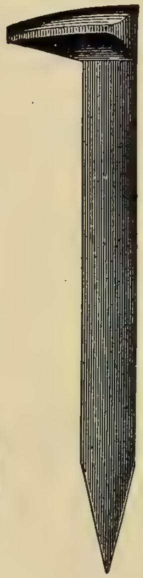
Jurisdiction Over Electric Railways.

The Chairman of the Ontario Railway and Municipal Board, J. Leitch, K.C., has addressed the following letter to Premier Whitney: "I enclose a newspaper cutting from which it appears that the Dominion Railway Act is to be amended so as to make it clear that no railway operated by electricity shall have the right to run on the highways in Ontario without the consent of the municipality. This is all right as far as it goes, but if it rests here the provision will be useless to the municipalities. The prohibition against building an electric railway on a highway without the consent of the municipality will necessarily lead to an agreement with the municipality, wherein the rights of the railway and of the municipality will no doubt be defined. The municipality's difficulties will not end here, and this is where the proposed amendment will turn out to be a failure. There is no provision in the Dominion Railway Act for the enforcement of an agreement between a railway and a municipality. There cannot be, because the enforcement of agreements is a civil right which is within the exclusive jurisdiction of the province. The Ontario Railway and Municipal Board Act, 1906, has the provision which the Dominion Railway Act has not, and cannot have, giving the board power and jurisdiction to construe agreements between railways and municipalities and enforce them to the extent of taking possession of and running the railway.

"With the proposed amendment to the Dominion Railway Act, a municipality will find it is in a position of having an agreement with the railway company, which it cannot enforce, and which the company may break with impunity. In fact, as soon







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as such an agreement is made the municipality will be powerless.

"The only remedy for this is for the Dominion Parliament to provide that agreements between the railways and the municipalities should be subject to the jurisdiction of the Ontario Railway and Municipal Board. It may be said, why not leave the enforcement of these agreements to the High Courts? The answer to this is that the courts have no machinery to enforce these agreements. They might give damages, but giving damages is not an effective remedy. The fact is that no electric railway should be declared for the general advantage of Canada and taken away from local jurisdiction.

"In a conference upon this subject with a prominent Dominion official some time ago, he agreed that the situation was difficult and unsatisfactory; that the Dominion Railway Act was not intended to apply to electric railways at all; that it has no machinery for the regulation of electric railways, and that it contains no power or authority, nor could power be given to the Dominion Board of Railway Commissioners for the enforcement of agreements with the municipalities. His opinion was that there should be a conference.

"It has been suggested that legislation should be procured putting all electric railways under the jurisdiction of the Ontario Board, and all steam railways under the jurisdiction of the Dominion Board. The reason why, perhaps, all steam railways should be under the jurisdiction of the Dominion Board is obvious. The cars of steam roads run from the Atlantic to the Pacific, and being under Dominion jurisdiction, uniformity of regulations and of appliances is secured. However, this is a point which would require to be well considered.

"I enclose a list of the railways which have been incorporated by the Legislature of Ontario, and which have been declared for the general advantage of Canada. In this list I have marked the electric railways which have either been incorporated or have been declared by the Dominion Parliament for the general advantage of Canada. No reason existed for their incorporation by Dominion authority or for the declaration of general advantage. The roads were not interprovincial or international in any sense, but railways of purely local concern. The declaration of general advantage leads to peculiar results. A railway is incorporated by the Provincial Legislature. Immediately agreements have been entered into with the municipalities and the road is in operation for some time, on one pretence or another the company gets a declaration from the Dominion of general advantage. This has not the effect of repealing the local legislation. It prevents further provincial legislation and it removes the road from the jurisdiction of the Ontario Railway Board. The consequence is that we have provincial legislation on the statute books and agreements with the municipalities in full force, but incapable of enforcement for the reason that the Dominion Act provides no machinery, and the Ontario Railway Board has no power, because the railway has been taken from under their jurisdiction by the declaration of general advantage.

"Further, by the Ontario Railway Act, 1906, an electric railway may only charge a rate of 2c. per mile. Under Dominion legislation they are entitled to charge 3c. By getting Dominion legislation the company can evade the fixed and settled policy of the Provincial Legislature that a 2c. per mile rate should prevail.

"These questions have, as you are aware, been brought to my notice by the Hamilton Radial Railway Bill, which is now before the Dominion Parliament, and in response to your request I give you my views as above."

List of railways incorporated by acts of the Parliament of Ontario declared by Parliament of Canada "works for the general advantage of Canada":

Algoma Central Ry. Co., afterwards Algoma Central and Hudson Bay Ry.

Amherstburg, Lake Shore and Blenheim, afterwards Lake Erie and Detroit River Ry. Co.

Brighton, Warkworth and Norwood Ry.

Brockville and Ottawa Ry.

*Brockville and Westport Ry.

*Chatham Street Ry. Co.

Credit Valley Ry. Co.

Erie and Huron Ry. Co.

Erie and Niagara Extension Ry.

Fenelon Falls Ry. Co., afterwards Victoria Ry. Co., finally Midland Ry. Co.; operated by G.T.R.

Gananoque and Rideau Ry. Co., afterwards Thousand Islands Ry. Co.

Georgian Bay and Wellington Ry. Co.

Grand Valley Ry. Co., formerly Port Dover, Brantford, Berlin and Goderich Ry.

Hamilton, Ancaster and Brantford Ry. Co. formerly Chedoke and Ancaster Electric St. Ry. Co.; now operated under Brantford and Hamilton Electric Ry. Co.

Hamilton and North-Western Ry. Co.

Huron and Ontario Ry. Co.

Leamington, Comber and Lake St. Clair.

London, Huron and Bruce Ry. Co.

London and Port Stanley Railway Co.

*Niagara and St. Catharines Rd. and Steamboat Co.

*Niagara and St. Catharines St. Ry. Co.

Norfolk Ry. Co.

Northern Extension Ry. Co.

Northern and North-Western Jct. Ry. Co.

Ontario, Belmont and Northern Ry. Co.

Ontario and Rainy River Ry. Co.

Ontario and Sault Ste. Marie Ry. Co.

Ottawa, Arnprior and Renfrew Ry. Co.

Ottawa Electric St. Ry. Co. (partially).

*Oshawa Street Ry. Co.

Pembroke Southern Ry. Co.

Port Arthur, Duluth and Western Ry. Co.

*Port Dalhousie, St. Catharines and Thorold Electric St. Ry. Co. (parts of this railway).

Port Dover and Lake Huron Ry. Co.

Prince Edward County Ry. Co.

Sault Ste. Marie Ry. Co., afterwards Sault Ste. Marie and Hudson Bay Ry. Co.; now the Ontario, Hudson Bay and Western Ry. Co.

St. Catharines and Niagara Central Ry. Co. (name changed to Niagara, Hamilton and Pacific Ry. Co.).

Thousand Islands Ry Co..

Thunder Bay Colonization Ry. Co. (name changed to Port Arthur, Duluth and Western Ry. Co.).

Toronto, Grey and Bruce Ry. Co.

Toronto, Hamilton and Buffalo Ry. Co.

Toronto and Nipissing Ry. Co.

Windsor, Essex and Lake Shore Rapid Ry. Co.

Roads marked with an asterisk are electric roads.

Grain Elevator Notes.

The Western Canadian Mills Co.'s elevator and warehouse at Vonda, Sask., were recently destroyed by fire.

During the year 1907 the quantity of grain passed through the elevator at St. John, N.B., was 610,000 bush., against 347,226 in 1906, and 75,214 in 1905.

At a recent meeting in Moosomin, Sask., a resolution was passed to the effect that the time had arrived when the Dominion Government should own and control all terminal elevators and drying plants.

The Vancouver B.C., Board of Trade recently revived the question of the erection of a public elevator there, and passed a resolution calling upon the city to reopen negotiations with the Dominion Government.

J. A. Jamieson, speaking at Montreal recently, said that the Dominion Government elevator at Port Colborne, Ont., which was being constructed from his designs and under his supervision, would be ready to receive grain soon after the opening of navigation.

J. H. McQueen, Superintendent C.P.R. elevators at Owen Sound, Ont., died there Jan. 11, after a short illness. Prior to his last appointment, which he held for 20 years, he was Superintendent of the elevators at Queen's wharf, Toronto and at Portland, Me.

The total receipts of wheat at the Fort William and Port Arthur elevators for Dec. was 7,317,888 bush., against 4,093,820 in Dec., 1906. The amount shipped was 6,941,490 bush., against 5,616,672 in the previous year. Of the quantity shipped in Dec., 5,302,267 bush. were carried by water, and the remainder by rail.

The Saskatoon Milling and Elevator Co., it is reported, will erect three, and possibly four, elevators in Saskatchewan during this year. One is to be built at Delisle, one at Zealandia, and one at or near Lanigan. If the fourth one is decided on, it will probably be erected on the line of the Grand Trunk Pacific Ry. at or near French.

The Maple Leaf Flour Mills Co. recently erected a 5,000 barrel mill at Kenora, Ont., with elevator and storage for 450,000 bush. of grain. The whole plant was put into operation recently, and on Jan. 14 the flour mill was completely destroyed by fire, the damage being estimated at about $1,000,000. D. C. Cameron, Winnipeg, is President of the company.

At a special meeting of the Milling and Elevator Co.'s shareholders at Saskatoon, Sask., recently, a resolution passed at a previous meeting, authorizing the directors to mortgage the property of the company, was confirmed, and at a subsequent meeting the future plans of the company were discussed, as a result of which it is probable that an application will be made to increase the capital.

The Wilson-Leslie Co. is being organized at Saskatoon, Sask., for the purpose of building and operating grain elevators and flour mills throughout the province. It has been decided to erect an elevator and flour mill at Saskatoon, and other elevators at various points in the district, building operations to be commenced in the spring. J. Wilson, Mayor of Saskatoon, is President of the provisional organization.

The following officers and directors were elected at the recent annual meeting of the Brandon, Man., branch of the Grain Growers' Association: President, W. Nichol; Vice-President, W. E. Lawson; directors, J. F. Valens, J. Campbell, S. C. Doran, J. M. Roddick, J. M. Allen and I. Hunter. R. Mackenzie, who had been Secretary of the branch since its inception, resigned and J. Campbell was appointed to succeed him.

The Western Farmers Elevator Companies' Association is about to be formed "for the purpose of handling the crops of the Northwest for the best interests of the producer." This decision was arrived at at a meeting held in Brandon, Man., Jan. 14, and a committee was appointed to draft a constitution and by-laws for the purpose of organizing and combining all the farmers' elevators in Manitoba and Saskatchewan. The following have been elected directors: A. Shepherd, A. Morrison, P. Wright, A. R. Wells, R. M. Wilson, G. Christie, and O. Sutherland.

C.P.R. Elevator at Fort William, Ont.

Following are particulars of elevator D, at Fort William, contract for the reconstruction of which has been let to the Barnett and McQueen Co. The handling house will be 56 ft. wide by 154 ft. long, with shed 10 ft. wide and of the same length as the handling house, the height of which will be 165 ft. from base of rail to the eave. The track shed will be 66 by 182 ft., with four railway tracks and four receiving hoppers on each track. The shed will rest on a pile and concrete foundation, and have a steel frame enclosed with corrugated galvanized sheets on the sides, with fireproof roof. The work house, shed and stair tower will have pile and concrete foundation, the first story frame of work house up to and including the bin bottoms to be of reinforced concrete, the bins themselves being of reinforced fire clay tile. The cupola frame is to be of steel and enclosed in two thicknesses of fire clay tile, with fireproof roofs and floors. A drainage system will be arranged to keep the basement free of water. A complete dust collecting system, including floor sweeps, garner exhausts, and all other appliances, will be supplied to make the plant complete to receive, store, and clean grain up to its full capacity. It is estimated that the average receiving capacity will be upwards of 24 cars of grain per hour, and the cleaning capacity, with medium sieves, will be equal to that.

The following are the chief items of equipment: 4 stands receiving elevators with two lines of 14 in. by 7½ in. buckets; 4 stands shipping elevators with two lines of 14 in. by 7½ in. buckets; 5 stands cleaning elevators, one line of 16 in. by 7 in. buckets; 1 stand screening elevator of one line of 16 in. by 7 in. buckets; 20 receiving separators on first floor; 6 wild oat separators in cupola; 2 screening separators in cupola; all cleaning machines of iron-covered wood; 1 4-drum car puller, with 4 back haul drums; 16 pairs car shovels; 2 lines of 12 in. screw conveyors in basement; 4 receiving belt conveyors from track hoppers; 8-1,600 bushel standard hopper scales; 8-1,600 bushel garners; 2 special garners serving cupola cleaning machines; 1 passenger elevator in stair tower; 1 ticket elevator between first and scale floors; and a full equipment of electric motors, lights and signals. In our Jan. issue the approximate cost of the construction was given as $600,000, but we are advised that it will be in the neighborhood of $400,000.

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The Grain Commission and the Elevators.

The Grain Commission's report was brought before the Dominion Parliament Jan. 8. As a result of prolonged enquiry the Commissioners have come to the conclusion regarding elevators, that any system of public or Government weighing would be impracticable. They could suggest no plan which would be just as between the elevator and the farmer, other than the rights given under the Grain Act, and the protection given by the law as to weights and measures. They recommend that where a warehouse commissioner has investigated a complaint under sec. 37 of the Grain Act, and has found that the complaint be true, he should be given power to direct the owner of such elevator to make proper redress to the person injured, and to order the discharge of the offending operator. On the question of Government owned elevators, the Commissioners cannot accept the suggestions that the Government should build and operate large interior storage elevators, on the grounds that it would involve extra expense in handling, and the payment of stop-over charges to railway companies;

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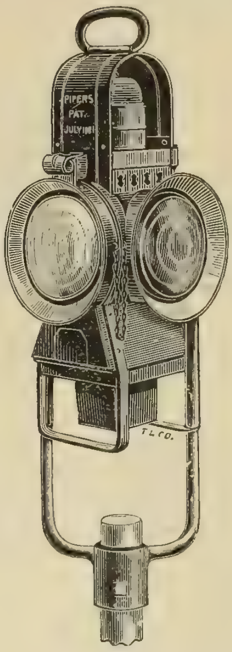

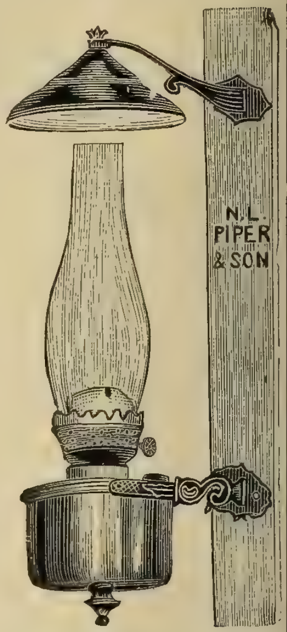

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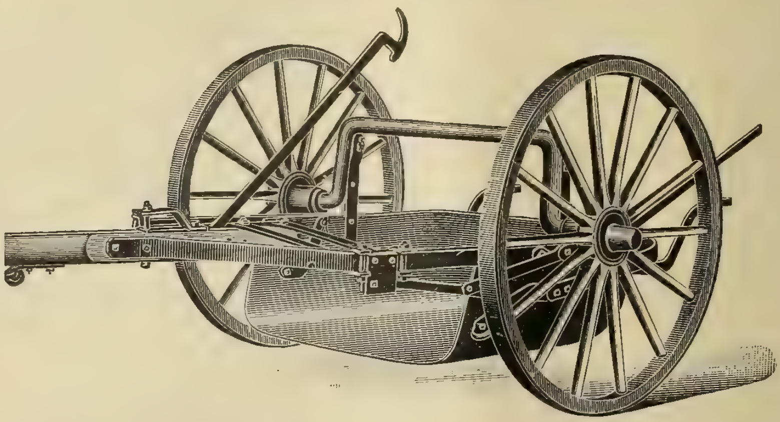

extra loss to grain in re-handling; when the railways would be able to supply a larger number of cars for moving grain, these elevators would be useless; the grain stored would not be available for market, and would still have to be forwarded to the lakes at the opening of navigation, and because of the difficulty of persuading shippers to send their grain to such interior elevators. Recommendations are also made that no grain be allowed to leave the elevators without being officially weighed and cleaned, and the Commissioners state that it is clear there is not sufficient supervision of the cleaning of the grain at Fort William, and suggest that cleaning machines of greater capacity than those now in use be installed. It is also recommended that the warehouse commissioner be given power to order cars to elevators which appear to be in danger of collapse, or where it is apparent that the grain stored in them is heating. In the course of their investigations it was found from the out-turns of vessels carrying grain from Fort William and Port Arthur, that there were considerable individual shortages, and over-rates, they therefore consider it advisable that the inspection department should be put in full control of cleaning or binning all grain passing through the terminal elevators at Fort William and Port Arthur, and that the weighing be taken out of the inspection department, and a new department be created, with a chief weighmaster to weigh all grain where necessary at public elevators. The Commissioners think that as there is a possibility of the grain trade being developed with the Orient, and no facilities for handling grain westward, and cost of transportation being too heavy, the Government would be justified in assisting such development.

MARINE DEPARTMENT

Atlantic and Pacific Ocean Marine.

The Allan Steamship Line is reported to have ordered eight of its vessels to be equipped with the Submarine Signal Co.'s equipment.

The C.P.R. Atlantic Steamship Line will, it is understood, shortly put on a first-class service with Antwerp, and make calls at one of the French ports.

The Allan Steamship Line is reported to be arranging for a weekly service between Canada and France, instead of as at present a sailing once every three weeks.

A. S. Mihara, of the Nippon Yusen Kaisha, has been transferred from Hong Kong to New York, as agent for the company, with territory covering the United States and Canada.

The British steamship Port Patrick was towed into Victoria, Jan. 7, for repairs, she having collided with the Columbia bar lightship, and subsequently ran into the breakers and struck a rock near Grey's harbor on the Washington coast.

At the recent opening of the final session of the present Newfoundland Legislature, the Governor announced that construction would be commenced next summer in preparation for the establishing of a fast service between Canada and Great Britain, via Newfoundland.

Electric submarine bell stations have been installed by the Submarine Signal Co. at St. John, N.B.; Yarmouth and Louisburg, N.S., making, with Chebucto Head at Halifax, N.S., four electric stations in Canadian waters. Three experimental bell-buoys are being placed near Halifax.

The English Post Office authorities have decided that the mails are still to be dealt with at Queenstown, Ireland. It was stated recently that on account of the delay, and of alleged danger in the harbor there, the Cunard steamships Lusitania and Mauretania would take the mails at Liverpool.

A working agreement has been arrived at between W. Thomson & Co., Leith, Scotland; W. Thomson & Co., St. John, N.B.; W. Thomson & Sons, Dundee, Scotland, and Carin, Noble & Co., Newcastle, Eng., for the placing of their separate fleets under one management. The total fleets comprise about 60 vessels. The Canadian service will still be carried on in the same name as at present.

The contract for the floating of the C.P.R. steamship Mount Temple, which ran ashore near Bridgewater, N.S., in Dec., has been placed with the Halifax Salvage Association. The cargo has all been removed, and operations will be commenced as early as possible and continued as long as the weather allows. For the first time on the Atlantic coast, an attempt will be made to float the vessel by means of compressed air.

The Australian Government has entered into an agreement for a continuation of the present steamship service between Australia and Great Britain, for 10 years, dating from 1910. The terms include a fortnightly service as at present, but the boats to be provided are to be larger and faster than those now in service. The subsidy grant under the new arrangement is to be $850,000, an increase of $250,000 over that granted under the present agreement.

The representatives of various steamship companies operating between Great Britain and Canada, held a meeting in Montreal recently, and decided to send a memorial to the Government protesting against the new immigrant rule, which provides that every European immigrant to Canada must have at least $30 in his possession, or he will be returned to his point of embarkation. It is claimed that the companies have suffered financially on account of this rule.

The Mexican Pacific Co. is reported to be about to establish a steamship line between Acapulo, Manzanillo and Mazatin, and other Mexican and American ports on the Pacific coast, and British Columbia. The company will operate five vessels, and it was expected that the line would be inaugurated during January. The principal members of the company are: M. Thomsen, J. D. Trenholme, T. F. Ryan, F. M. Connell, Seattle, Wash.; T. C. Greenough, Butte, Mont.; O. Weiler, Victoria, B.C., and F. T. Warren, Toronto, Ont.

The Cunard Steamship Line announced, Jan. 15, a reduction of a further ten shillings in the second and third-class Atlantic rates. The White Star, Allan, Dominion, and C.P.R. steamship lines have also reduced their rates. The rates on the Canadian companies' vessels were, at a conference held at Montreal, reduced from $42.50 to $30 for second-class, and from $28.75 to $17.50 for steerage passengers, on the better class boats, and on the other class vessels the steerage rate was reduced from $27.50 to $16.25, between Canada and Great Britain.

The wreckage which has been washed ashore on the Vancouver Island west coast appears to indicate that a steamship named Hartfield has been wrecked. Lifebuoys and fittings have been discovered bearing the name "Hartfield, Liverpool." The British steamship Hartfield was en route from Liverpool to Port Townsend, and it is stated that there were 30 persons on board. No news of any kind has been received. The Hartfield was built at Whitehaven, Eng., in 1884, her dimensions being: length, 261.7 ft.; breadth, 39.3 ft.; depth, 24.1 ft., and tonnage 1,815 register.

The report that the Canadian subsidy of $180,000 a year, to the Union Steamship Line for the service between Vancouver, B.C., and Australia and New Zealand ports was omitted from the estimates, appears to be unfounded. The amount for mail subsidies for the ensuing financial year has been voted as formerly, with an increase of $50,000 for service with Great Britain. In this connection the Premier, replying to a question in the House of Commons recently, said that the old contract had been entered into by Canada, and had been sent to New Zealand for signature. A press report states that the contract has been returned to the Dominion Government, the Union Steamship Co. of New Zealand having declined to accept the conditions named therein.

The Allan Line steamship Hesperian was launched at the Linthouse yards of Alex. Stephen & Sons, Glasgow, Scotland, recently. The new vessel, which is a sister ship of the Grampian, has been built to the highest class of the British Corporation for the survey and registry of shipping, and is on the cellular double bottom principle, and specially strengthened for the North Atlantic trade. Her dimensions are: length, 502 ft.; breadth, 60 ft.; depth, to shelter deck, 41½ ft. She is a twin-screw steamer, with a double set of triple expansion engines, supplied with steam from boilers fitted with a forced draught. It is estimated that she will be able to maintain a speed sufficiently high to complete the voyage from Glasgow to Canada under seven days. A full description of the Grampian was given in our Sept., 1907, issue.

The C.P.R. steamship Mount Royal, which in our last issue was reported as considerably overdue at St. John, N.B., from Antwerp, and for which grave fears were entertained, arrived at Queenstown, Ireland, Jan. 7, thirty days after leaving Antwerp. The captain reported that after leaving the Lizard strong gales were met with, and the boilers began to leak. As it was only possible to make temporary repairs, it was decided, when about 1,100 miles from land, to turn eastward, and proceed slowly for Queenstown, the nearest port. The passengers were transferred at Queenstown to the C.P.R. steamship Montrose, and renewed their voyage, while the Mount Royal was towed to Liverpool by the Lake Manitoba, also a C.P.R. vessel. The Montrose arrived at St. John, N.B., Jan. 26, about five days overdue being delayed by heavy weather.

Maritime Provinces and Newfoundland.

J. J. Ewing, Superintendent Engineer of the Pickford and Black Steamship Line, and formerly in the Cunard Co.'s service, died at Halifax, N.S., Jan. 7, aged 70.

During the 1907 season the Reid-Newfoundland Co.'s steamship Bruce made 140 round trips between Port aux Basque, Nfld., and Sydney, N.S., carrying about 16,000 passengers.

The Pickford and Black Steamship Line

agency at St. John, N.B., recently held by Schofield and Co., local agents of the Robert Reford Co., Montreal, has been transferred to W. Thomson and Co.

The Dominion Atlantic Ry. Co.'s steamship Yarmouth, which was recently severely damaged by running aground at Black Point, has been fitted with a false bottom, and taken to New York for thorough repair.

The Dominion Government has decided to build a wharf at St. John, N.B., extending from the end of the wharf now being built by the city to the harbor line, and north-west along the harbor, at an estimated cost of $300,000. Tenders will be invited for the work at an early date.

The schooner Baden Powell, which left Halifax, N.S., Sept. 7, for the Antarctic ocean, has been wrecked at Falkland islands, and become a total loss. She was built at Lunenburg, N.S., in 1900, her dimensions being: length, 90.6 ft.; breadth, 24.0 ft.; depth, 9.6 ft.; tonnage, 94 register.

The schooner Oceanic, bound from New York to Halifax, N.S., struck on the Half Moons recently, and became a total loss. She was built at Lunenburg, N.S., in 1904, and owned in LaHave, N.S. Her dimensions were: length, 95.5 ft.; breadth, 25.5 ft.; depth, 10 ft.; tonnage, 99 register.

The St. John, N.B., harbor commission committee is to prepare a report of work done on the harbor works, and also a scheme of harbor improvements, which it is proposed to lay before the Dominion Government. The City Council recently refused the request of the committee for the allocation of funds with which to engage the services of a competent engineer and accountant for the preparation of such a scheme, but promised to supply all necessary information.

A press report states that a proposal is on foot to form a company with a capital of $250,000 and a directorate composed of Nova Scotia and Boston, Mass., capitalists, to inaugurate an additional steamship service between some point in Nova Scotia, not yet decided upon, and Boston. The management of the Halifax and Southwestern Ry. has been approached on the subject, and it is anticipated that arrangements will be made with that company. It is announced that $150,000 has already been subscribed.

The Charlottetown, P.E.I., Board of Trade, at a meeting held Jan. 8, passed a resolution asking that the ferry service across Northumberland strait, winter and summer, be owned and managed by the Department of Railways. The President, in his address, said that Brule, N.S., would be a more suitable winter terminus than Pictou. Brule at present is without railway accommodation, but it is the terminus of a line which the Midland Ry. of Nova Scotia (now owned by the Dominion Atlantic Ry.) proposed to construct from Truro.

The Dominion Government has passed an order-in-council, annulling the existing coasting privileges of foreign vessels. The order provides that after Jan. 1, 1909, no goods nor passengers shall be carried by water from one part of Canada to another, except in British vessels. In this connection a press report recently stated that the result of this order would shortly be seen in the transfer en bloc of about 50,000 tons of Norwegian shipping, at present engaged in coasting, mostly with coal, to the Canadian register.

The Magdalen Island Steamship Co. is having a steamship built in England, to be named Evangeline. Her chief dimensions will be: length, 175 ft.; breadth, 28 ft.; with a draft of 11 ft., carrying 500 tons

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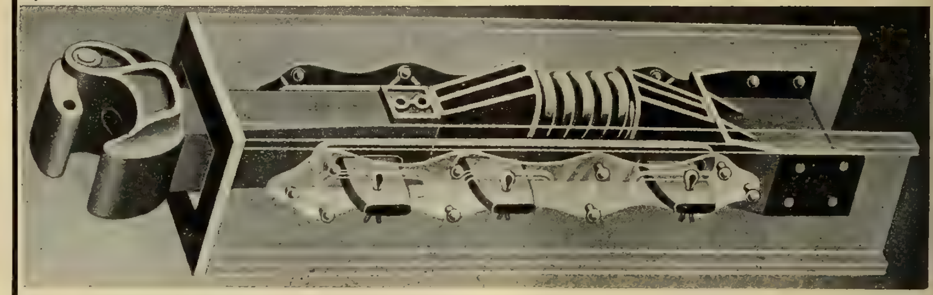

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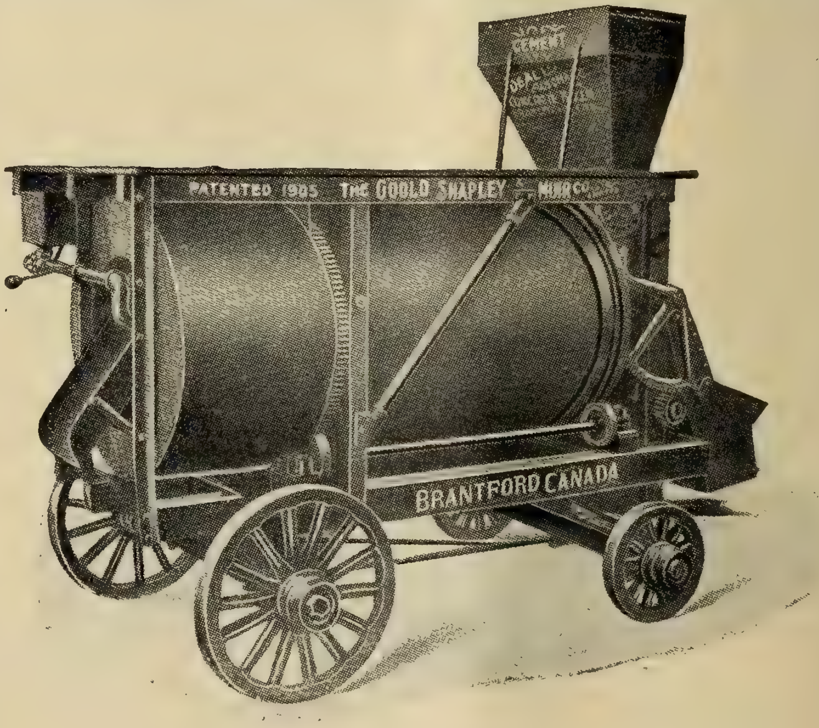

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of cargo. She will be fitted with all the latest improvements, side port, elevator, derrick, etc., and 37 staterooms. The vessel was recently launched, and it is expected she will be completed in time to reach Halifax, N.S., by the end of March. She will run between the Magdalen islands, and Pictou and Souris, in charge of Capt. R. D. Burns.

Sir R. G. Reid and the Reid-Newfoundland Co. have entered actions against the Newfoundland Government for $1,250,000 damages in respect to alleged breaches of contract respecting the operation of steamship lines. Several years ago the Newfoundland Government entered into a contract with Sir R. G. Reid to operate a number of steamship lines round the coast of the Island and along the Newfoundland-Labrador coast, and a service between Port Aux Basques and Sydney, N.S. On the accession of the Bond Government the railway contract was revised, which resulted in lengthened arbitration proceedings. In 1904 the Government entered into a contract with Bowering Bros. of St. John's, by which subsidies were provided for the operation of two steamers on different routes on the coast of the island in competition with the Reid steamers.

The Chignecto Marine Transport Ry. Co. in 1890 made an agreement with the National Safe Deposit Co., respecting the disposal of certain funds placed in the hands of trustees. Notice is given that the National Safe Deposit Co. will on Feb. 10 pay out such money to the holders of the mortgage bonds as are entitled thereto under the terms of the deed. The C.M.T.R. Co. was incorporated by the Dominion Parliament in 1882 for the purpose of constructing a railway across the narrow neck of land separating the Bay of Fundy from Northumberland strait, for the purpose of hauling vessels out of the water, transporting them across the isthmus and placing them in the water again. The company secured the grant of an annual subsidy for 25 years, in the same year, and acts respecting the subsidy were passed in 1886, 1888 and 1891, while acts respecting the company's bond issue were passed in 1883 and 1892. The capital invested in the undertaking was almost entirely British, but difficulties of construction and finance could not be overcome as readily as the promoters expected, and very little construction was done. The Dominion Parliament subsequently refused to grant extensions of the subsidy contracts, and the work was abandoned. Efforts on the part of the bondholders to secure some compensation for the work done were fruitless, and the final steps for closing out the company's affairs are now being taken.

Province of Quebec Marine.

F. Carbray, a member of the Quebec Harbor Commission, died at that city recently, aged 72.

L. C. Webster was elected Jan. 10 to fill the vacancy caused by the death of F. Carbray on the Quebec Harbor Commission, for the balance of the term for which Mr. Carbray was elected.

The following officers of the Montreal Pilots' Association for the current year have been elected: President, W. Gauthier, Deschambault; Secretary-Treasurer, L. Z. Bouille, Deschambault; Committee, C. Anger, Levis; T. Hamelin, Grondines; A. Angers, Ste. Anne-de-la-Parade.

The Department of Marine records, dating from 1852, only show two occasions when the St. Lawrence river was free of ice after Jan. 1. This year will probably establish a record in this respect, as with the exception of the shallower portion of Lake St. Peter, there was a clear channel to the sea well on into January.

G. W. Stephens and F. W. Cowie, President and Engineer respectively of the Montreal Harbor Commission, were passengers on the C.P.R. steamship Empress of Britain, sailing from St. John, N.B., Jan. 11. Visits are to be paid to the principal maritime ports of Europe, for the purpose of studying harbor construction, and the various methods of dealing with cargoes, with a view to carrying out several improvements in the Montreal harbor.

Ontario and the Great Lakes.

Capt. A. Craigie, harbormaster at Goderich, died there Jan. 10.

R. Maw, who for several years owned and sailed schooners on the lakes, died at Toronto Jan. 5, aged 70.

The Windsor Dredging Co., Ltd., has passed a by-law decreasing the number of directors from eight to five.

R. W. Perks will, it is expected, visit Canada during the present month in regard to the Georgian Bay canal project.

The steamboat Florence B., owned in Detroit, Mich., which has been purchased by the Great Lakes Dredging Co., Port Arthur, Ont., is a small vessel, built in 1892, 24 tons gross, 20 tons net; length, 50 ft.; breadth, 11 ft.

At a meeting of the Public Accounts Committee of the Dominion Parliament, Jan. 10, a motion was made for the calling of A. F. Bowman, M.P.P., for examination in connection with the dredging works at Fort William and Port Arthur.

W. M. German, M.P., recently assured the Stamford, Ont., Council that Parliament would this session make an appropriation for the survey of the Welland river, with a view to making it navigable for vessels of the Welland canal type.

The Dominion Government has called for a report from the International Waterways Commission, on the proposal of the Long Sault Development Co., to dam the St. Lawrence river, at the foot of the Long Sault rapids, above Cornwall, Ont.

The steam tug Escort, which was sunk recently near Port Dalhousie in a race for the last tow of the season, has been raised and taken into port, where some temporary repairs will have to be made prior to her being taken to the drydock for an overhauling.

The U.S. lake survey reports levels on the Great Lakes for Dec. as follows: Superior, 602.55; Michigan and Huron, 580.58; Erie, 572.24; Ontario, 246.28 ft., above tide water. Since the previous month the levels have fallen, in Superior 4 ins., Michigan and Huron 2¼ ins., Erie 1½ ins., while Ontario remained the same.

The tug Beatrice M., owned by the James Bowman Fish Co., Port Arthur, was seized recently by order of the Dominion Government on a charge of carrying passengers without a license. The tug had been chartered by the Northern Islands Pulp Wood Co., and was taking a gang of the company's men to Simpson Island.

The Dominion Ministers of Railways and of Public Works, received a deputation Jan. 10, which urged that the Government undertakes, as soon as possible, the dredging of Tiffin and Victoria harbors, in Georgian bay. It was stated that these plases would be made the chief terminals for the lake grain traffic, by the G.T.R. and C.P.R. respectively.

A press report states that a company is being formed for the purpose of building and operating a modern drydock at Owen Sound. W. P. Telford, M.P., is interested in the project and, it is stated, will visit England in the spring for the purpose of raising additional capital to that obtained locally, on which it is said the Dominion Government will guarantee 3% interest.

Three actions against the Richelieu and Ontario Navigation Co., brought by the Ogilvie Flour Mills Co., the Northern Elevator Co., and the Canada Atlantic Ry. Co., for damages for the grounding of the barge Huron in the Soulanges canal last May by the Navigation Co.'s steamboat Hamilton, were dismissed, the judgment holding that the Hamilton passed the barge in a proper manner.

The Donnelly Salvage and Wrecking Co., of Kingston, Ont., which bought the steamboat Saquia at Buffalo, N.Y., in the spring of 1907, has rebuilt her in the Kingston drydock, thoroughly overhauled her engines and boilers, and fitted her with special appliances for wrecking purposes. She has accommodation for 800 tons of lighterage, and has been sent to Cobourg, Ont., to keep the harbor open during the winter for the Ontario Car Ferry No. 1.

The Farrar Transportation Co.'s annual meeting was held at Collingwood, Jan. 9, when the directors' report for the year, which is said to have shown a satisfactory working, was adopted. The following officers and directors were elected for the current year: President, C. A. Farrar; Vice-President, W. R. Rowland; Secretary-Treasurer, G. E. Fair; Directors, D. D. Lewis, E. R. Whalen, J. M. Smith, G. E. Fair, G. P. Pearsall, T. I. Thomson, H. Cleland, and W. J. Smith.

The Kingston Shipping Co., recently incorporated, is having built at Dumbarton, Scotland, a steamboat, to be named Cataraqui. She will be a full size Welland canal bulk freight steamer, with triple expansion engines, cylinders 18 ins., 30 ins., and 40 ins. diam., by 33 ins. stroke. Her general dimensions will be; length, over all, 256 ft.; beam, 43 ft.; depth, moulded, 22 ft. The officers of the company are: President, H. A. Calvin; Vice-President, H. H. Richardson; Secretary-Treasurer, S. C. Calvin.

The Pere Marquette Rd. Co.'s car ferry steamer No. 16 on Lake Michigan was caught in a storm recently and severely damaged. The cars, numbering 28, came unfastened, tearing up the tracks, breaking up the deck fixtures, and smokestacks. Two of the cars loaded with pig iron broke through the deck, one going into the firehold, and the other falling on the engine. The boat put in at Milwaukee, Wis., where it is possible she may be rebuilt. The damage is estimated at between $30,000 and $50,000.

The Fort Erie Ferry Co. and Fort Erie Ferry Ry. Co. have decided to begin the construction, as soon as the weather will permit, of a dock at Fort Erie Grove, Ont. In connection with this dock it is proposed to run a steamboat during the summer months from the foot of Main St., Buffalo, N.Y. Following are the officers and directors for the current year: President and Treasurer, F. J. Weber; Secretary, L. D. Woodruff; Superintendent, W. Wharton; other directors: W. E. Will, H. M. Gear, P. Will, A. G. Bartholomew.

Some complaint seems to have arisen amongst marine captains at Kingston, as to the non-receipt of qualification certificates from the Department of Marine. It is stated that they wrote on their examinations and paid their fees two years ago, since when they have been in command on permits only, which permits the Customs Department has recently refused to accept. The matter has been taken in hand by the Government, and an official sent to Kingston to see that the necessary certificates are issued to the qualified men.

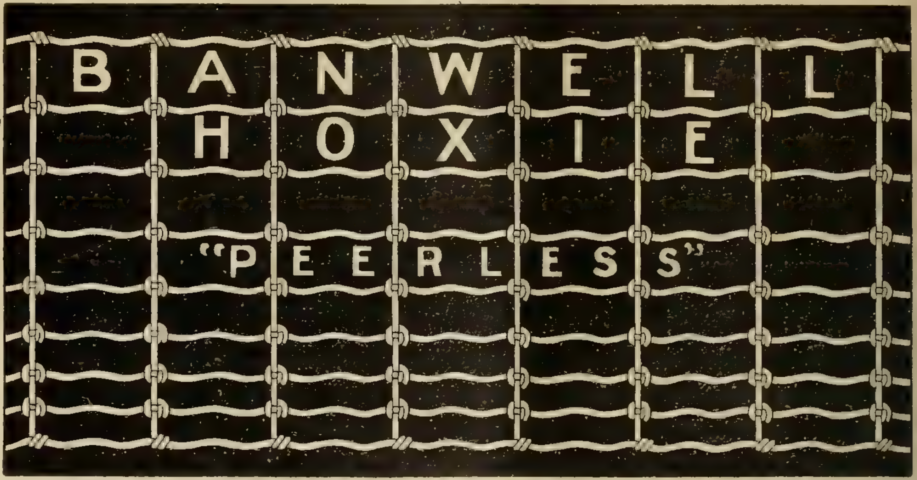
The annual meeting of the Muskoka Lakes Navigation and Hotel Co. was held in Toronto, Jan. 10. The report, which recorded a successful season, indicated that with the addition of the new steamer Cherokee, the transportation department would next season be in a better position to deal with the passenger traffic. The following officers and directors were elected for the current year: President, J. S. Playfair; Vice-President, F. T. Phillips; Directors, H. C. Maclean, R. A. Lucas, J. Playfair, and M. S. Wilson; W. S. Wasley was re-appointed Manager and Treasurer.

The question of constructing a new and improved western entrance to Toronto harbor from the lake has been the subject of considerable negotiation between the Department of Public Works and the local authorities, including the City Council, the Board of Trade, the Harbor Board, and the Board of Control. The Dominion Minister of Public Works recently stated that the Government had, subject to Parliament granting the necessary appropriation, decided to construct the proposed entrance. The cost of the work would be about $400,000, and it would take about three years to carry it out.

The Ottawa River Navigation Co.'s annual meeting was held in Montreal Jan. 8, when the report as to the season's work was adopted. Notwithstanding the drawbacks of late spring and generally broken weather, the company's operations, which are chiefly concerned with excursion traffic are stated to have been successful. Various improvements, such as providing more modern equipment for a number of the company's vessels, were authorized. The retiring officers and directors were re-elected for the current year, as follows: President, H. W. Shepherd; Vice-President, H. Wallace; Directors, R. W. Shepherd, and R. Bolton.

The Toronto harbormaster reported to the Harbor Commissioners, Jan. 10, that there had been an increase of tonnage of vessels entering the harbor during the past season, and that 88 vessels were wintering in the harbor. The receipts for the year were about $11,000, while the expenses were considerably reduced. The board granted the harbormaster six weeks' leave of absence, and an honorarium of $200. The Toronto Harbor Commission consists of two members appointed by the city, two by the Board of Trade, and one by the Dominion Government. Salaries are paid of $250 for the chairman, $150 for the vice-chairman, and $50 each for the others.

The St. Clair and Erie Ship Canal Co. is applying at the current session of the Dominion Parliament for an act to revive and amend the act incorporating the company, and to extend the time for constructing the works thereby authorized. The company was originally incorporated in 1899, the provisional directors being H. C. Boulthee, Toronto; Hon. D. Tisdale, Simcoe, Ont.; H. A. Olney, Saltash, Cornwall, Eng.; D. E. Henry, Detroit, Mich.; C. A. Yeomans, Neillsville, Wis., and power was given to construct a canal from the St. Clair flats canal through Lake St. Clair to Lake Erie. The time for starting construction was extended in 1900, 1902, 1904 and 1906, but in 1907 the Dominion Parliament refused to grant a further extension of time. The act of 1906, which was assented to May 11, however, granted two years from that day



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Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian....$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians.... 10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally) 8.00 " "
Map No. 5—Calgary District.... 8.00 to 10.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—Range 11 West, 4th Meridian to Range 7, West 5th Meridian.... 10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan and Eastern Alberta, 3rd Meridian to Range 10 West, 4th Meridian.... 10.00 to 25.00 per acre.

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"	"	10.00	"	"	239.70	"	"	"	81.62	"	" 200.00
"	"	11.00	"	"	263.60	"	"	"	89.78	"	" 220.00
"	"	12.00	"	"	287.60	"	"	"	97.96	"	" 240.00
"	"	13.00	"	"	311.55	"	"	"	106.10	"	" 260.00
"	"	14.00	"	"	335.60	"	"	"	114.32	"	" 280.00
	"	15.00	"	"	359.50	"	"	"	122.44	"	" 300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

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for the commencement of construction and five years for its completion.

There is at present about eight miles of river frontage in use at Fort William, Ont., and the works now in progress will make about 20 miles more available. The Dominion Government has voted $500,000 towards this work. During 1907 considerable progress was made in straightening the Kaministikwia River, the greatest improvement being opposite the grain elevators and the upper freight sheds. At the opening of navigation last year, the width of the river at that point was 230 ft., and during the year it increased to 385 ft. The dredging of the Mission River was another work which progressed during the year. A channel permitting the passage of 12 ft. vessels was opened from the mouth of the river to the bay, and it is hoped that during the coming season this will be dredged to a depth of 21 ft. From four to six dredges, with tugs and scows, were engaged in the work, which was undertaken by the Great Lakes Dredging Co.

The Merchants Steamship Co., recently incorporated, is having built at Hebburn-on-Tyne, Eng., a lake steamer, to be named Beaverton. The principal dimensions will be: length, 256 ft.; breadth, 42½ ft.; depth, 23½ ft., with a carrying capacity of about 3,300 tons. She will be provided with triple expansion engines, with cylinders 17, 28 and 46 ins. diam., by 33 ins. stroke, supplied with steam from two Scotch boilers, each 12 by 11 ft., at 185 lbs. pressure. The vessel is being specially built for the lake trade of grain and package freight, with 'tween decks, electric lighting, steam heating, and all the most modern and up-to-date appliances for the expeditious handling of cargo. It is expected that delivery will be made by April 15, and on arrival on the lakes she will be placed on the Montreal-Fort William route carrying package freight up and grain down, under the management of J. T. Mathews of the Mathews Steamship Line, Toronto. The officers and directors of the company are: President, J. T. Mathews; Vice-President, W. H. Moore; Secretary-Treasurer, A. E. Mathews; Directors, F. H. Richardson and F. B. Osler, Toronto.

A deputation representing navigation, lumbering, power and other interests on the Ottawa river, waited on the Dominion Government Jan. 8, to ask for an appropriation for the construction of a system of dams to conserve the flow of water. The total cost of the works suggested is estimated at $500,000, and the amount asked for is $160,000, so that the work may be started at once. The matter has been under discussion for several years, and the difficulties which had previously been encountered, it was stated, had been overcome. The chief difficulties concerned the power interests, and it had been arranged as a condition of the construction of a new dam at the Chaudiere, that the Government should carry out its impounding scheme on the upper waters of the river and its tributaries. The work would begin at the foot of Lake Temiskaming, and also be carried on at other points. It was pointed out that there was a sufficient supply of water for raising the levels in the different stretches of navigable waters in time of scarcity. The benefits of this scheme to the projected Georgian Bay canal, it was contended, fully justified the outlay. The Premier promised that the proposals would be given careful consideration by the Government.

Manitoba, Saskatchewan, Alberta, Etc.

Two piers of the bridge at Redwood, Winnipeg, have to be removed owing to the city not complying with the Dominion Government's regulations as to the width of spans over navigable waters. The work of changing the piers has been let to Kelly & Sons, Kenora, Ont.

The W. Pearson Co., replying to some complaints as to the running of its steamboat Qu'Appelle on the Last Mountain Lake, state that the Qu'Appelle made her trial trips Aug. 6, and after some needed readjustments of her machinery, was placed on the route Aug. 16. Between that date and the closing of navigation, two trips were missed, and four times the trips were not completed, through stress of weather, out of a total of 36 trips according to schedule. The season was shorter than that of the previous year, the Qu'Appelle being frozen up at her wharf on Nov. 10 in 1907, while in 1906 boats were running much later.

The snag boat, built on the Red River, near Selkirk, Man., was not, during 1907, used for the purpose for which it was constructed, and is being converted into a combined suction and clam-shell dredge. This information was given in the House of Commons, Jan. 8, by the Minister of Public Works, who further stated that the amount spent on the boat was $32,338.34; that the work was done under contract by the Polson Iron Works, Toronto; and that the vessel was built upon the recommendation of the Winnipeg Board of Trade, the Selkirk Board of Trade, and the Public Works Department's resident engineer of the district.

LIST OF STEAM VESSELS REGISTERED IN CANADA FROM DEC. 15, 1907, TO JAN. 15, 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Home Port.	Owners.
Alfreda	122,578	Tusket Wedge, N.S., 1907	Screw 6 N.H.P.	44.0	12.3	6.0	15	10	Yarmouth, N.S.	L. A. Leblanc, Tusket Wedge, N.S.
Anticosti II	122,030	Liverpool, N.S., 1907	" 8 "	59.4	13.5	5.8	35	21	Liverpool, N.S.	R. Neville, Halifax, N.S.
Armoco	122,537	Vancouver, B.C., 1907	" 10 "	56.5	14.5	7.2	46	32	Vancouver, B.C.	W. H. Armstrong, Vancouver, B.C.
Beaumont	124,160	Kirkintilloch, Scot., 1907	" 60 "	69.0	16.6	8.5	58	..	Midland, Ont.	J. Stewart & W. Felton, Glasgow, Scot.
Beaver	122,479	Simcoe, Ont., 1907	Pad. 2 "	49.6	18.3	3.3	31	14	Ottawa, Ont.	Upper Ottawa Improvement Co., Ottawa
Celtic	122,538	Vancouver, B.C., 1907	Screw 16 "	89.4	24.5	8.6	239	163	Vancouver, B.C.	Coast Steamship Co., Vancouver, B.C.
Curlew	122,178	Port Arthur, Ont., 1907	" 10 "	77.0	16.5	8.0	85	58	Port Arthur, Ont	
Evergreen	122,544	Ballard, Wash., U.S., 1901	" 8 "	49.0	13.5	9.0	39	27	Vancouver, B.C.	J. S. Emerson, Vancouver, B.C.
Ivanhoe	122,547	Vancouver, B.C., 1907	" 26 "	99.7	22.5	10.9	182	123	" "	G. I. Wilson, Vancouver, B.C.
Jessie B.	126,043	Rossport, Ont., 1905	" 1 "	29.0	8.0	4.0	5	3	Port Arthur, Ont	W. Dampier, Port Coldwell, Ont.
J. D. Morrison	122,179	Collingwood, Ont., 1907	" 32 "	78.0	20.0	11.6	116	79	" "	
Kathleen	126,031	Liverpool, N.S., 1907	" 16 "	75.1	16.4	7.1	63	38	Liverpool, N.S.	R. Neville, Halifax, N.S.
Naiad	122,539	Vancouver, B.C., 1907	" 8 "	58.0	12.9	7.5	46	31	Vancouver, B.C.	L. & J. Benoit, Albert Bay, B.C.
Pewabec	122,176	Lake Nepigon, Ont., 1906	" 8 "	48.0	12.0	5.0	29	20	Port Arthur, Ont	H. E. Knoble, Port Arthur, Ont.
Sea Gull	126,042	Heron Bay, Ont., 1907	" 3 "	42.0	13.0	6.0	15	10	" "	F. Dampier, Port Coldwell, Ont.
Tory	122,540	Vancouver, B.C., 1907	" 1 "	22.3	7.6	2.0	8	5	Vancouver, B.C.	J. R. Joliffe, Vancouver, B.C.
Tulalip	122,386	Seattle, Wash., U.S., 1904	" 5 "	33.5	9.0	3.6	12	6	Victoria, B.C.	J. A. Sayward, Victoria, B.C.
Undan	122,546	Vancouver, B.C., 1906	" 2 "	31.1	10.0	4.9	14	9	Vancouver, B.C.	F. M. Richardson, Vancouver, B.C.
Vadso	124,077	Gothenburg, Sweden, 1881	" 110 "	191.2	28.7	21.7	908	698	Victoria, B.C.	Boscowitz Steamship Co., Victoria, B.C.
We Two	122,541	Vancouver, B.C., 1907	" 9 "	50.9	13.5	6.4	32	22	Vancouver, B.C.	J. Pendygrasse, Vancouver, B.C.
William D.	121,593	Erie, Pa., U.S., 1899	" 1 "	35.6	9.5	3.4	10	7	Port Stanley, Ont.	J. Griffin, St. Thomas, Ont.
Yeba	122,545	Steveston, B.C.	" 2 "	33.4	9.0	3.0	9	6	Vancouver, B.C.	M. Suwa, Vancouver, B.C.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA FROM DEC. 15, 1907, TO JAN. 15, 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Home Port.	Owners.
Amerite	122,579	Stoney Island, N.S., 1907	Sloop	34.0	12.5	7.0	12	12	Yarmouth, N.S.	F. Swim, M.O., Deep Cove, N.S.
Dannie Goodwin	117,058	Dartmouth, N.S., 1907	Schr.	48.8	14.9	6.0	21	21	Canso, N.S.	Fish Ltd., Canso, N.S.
Dorothy Aleta	117,060	Whitehaven, N.S., 1907	"	36.0	11.2	5.6	11	11	" "	W. Munroe, Whitehaven, N.S.
Fortuna	117,059	Tancook, N.S., 1907	"	43.0	11.9	5.7	14	14	" "	J. H. Cousins, Canso, N.S.
Hazard	122,577	Yarmouth, N.S., 1907	"	65.5	20.4	7.8	63	63	Yarmouth, N.S.	H. B. Cann, M.O., Yarmouth, N.S.
I. K. L.	126,041	Welland, Ont., 1893	Dred.	103.0	34.5	9.0	321	321	Port Arthur, Ont.	R & R. G. Weddell, Trenton Ont. J. J. Manley, Merritton, Ont
Mermaid	111,797	Cheticamp, N.S., 1907	Schr.	35.6	11.4	6.4	13	13	Pt. Hawkesb'y, N.S.	T. Harris, Cheticamp, N.S.
Rose	125,995	Montmagny, Que., 1907	"	94.8	26.3	5.4	79	79	Quebec, Que.	Price Bros. & Co., Ltd., Quebec, Que.
Shamrock	125,996	" "	"	94.8	26.3	5.4	81	81	" "	" " " "
The Gay Gordon	122,286	Shelburne, N.S., 1907	"	103.0	25.2	10.5	161	161	Shelburne, N.S.	J. Marshall, Carbonear, Nfld.
Thistle	125,994	Montmagny, Que., 1907	"	94.8	26.3	5.4	79	79	Quebec, Que.	Price Bros. & Co., Ltd., Quebec, Que.
V. T. B., 4	122,542	Vancouver, B.C., 1907	Scow	86.5	32.0	9.1	224	224	Vancouver, B.C.	Vancouver Tow. & Barge Co., Ltd., Vancouver, B.C.
V. T. B., 5	122,543	" " 1907	"	86.4	32.0	9.1	224	224	" "	Vancouver Tow. & Barge Co., Ltd., Vancouver, B.C.

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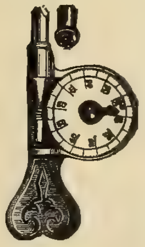

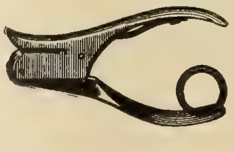

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The Alaskan Co.'s steamship Alaskan, formerly Mischief, owned in British Columbia, went ashore at Cape Mudge recently in a dangerous position.

The boiler of the Hudson Bay Co.'s steamboat Beaver, the first steam vessel to trade on the Pacific coast, is to be set up on the esplanade at North Vancouver as a memorial.

During the season of 1907 fifteen schooners were engaged in the Pacific sealing fleet operated from British Columbia ports, the total catch being 5,240 seals, the smallest on record.

The C.P.R. steamship Kuskanook ran ashore recently, about 15 miles east of Nelson, but was got off without sustaining material damage. One of the passengers jumped overboard and was drowned.

The lifeboat which the Dominion Government purchased in the U.S., and which was fully described in our Jan. issue, has arrived at Banfield Creek, Vancouver Island, and has been placed in commission.

The Pacific Whaling Co. is arranging for the purchase of a freight steamer to act as a tender to its whaling stations on the coast. It is expected that the vessel will be purchased in England and taken to Vancouver in the spring.

Bernard Purvis and Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $30,000, to carry on the business of dealers in coal, coke and other fuels; to build, charter, or otherwise acquire and operate steam and other vessels, and to act as carriers by land and water.

The U.S. Lighthouse Board has been asked to establish a fog alarm station on Kellet bluff, at the south-east end of Henry island, near San Juan. Kellet bluff is the nearest land to the boundary line in the Gulf of Georgia, and vessels pass within a short distance of it. A number of casualties have occurred there.

The Queen Charlotte Lumber and Manufacturing Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $150,000, to carry on the business of lumbermen, and to build, charter, purchase or otherwise acquire and operate steam and other vessels, and to act as general carriers by land and water.

The Provincial Land Development Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $35,000, to take over, manage, and develop lands in the province, and in connection therewith to construct bridges, roads, wharves, etc., and to build and operate steam and other vessels for the carriage of freight and passengers.

The Boscowitz Steamship Co.'s steamship Vadso ran ashore at Cape Lazo, on the east coast of Vancouver Island, Jan. 16, and it was feared she would become a total wreck. This vessel was brought to the Pacific coast subsequent to the wreck of the Boscowitz in 1903, and has recently been placed on the Canadian register. The particulars are given in the list of vessels registered in this issue.

The Bayard Timber Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $250,000, to carry on the business of loggers, timber merchants, etc., and to construct, maintain and operate logging railways, aqueducts, wharves, piers, docks, etc.; to build, charter, purchase or otherwise acquire steam and other vessels, and to carry on the businesses of ship and barge owners, lightermen, forwarding agents, and general carriers by land and water.

The steam yacht building on the Clyde, Scotland, for Hon. J. Dunsmuir, Lieut.-Governor of British Columbia, was expected to be launched Jan. 31. She has twin screws, and is a steel shelter deck type of steamer of 1,000 tons register, her dimensions being: length, 218 ft.; breadth, 32 ft.; depth, 22.9 ft. The engines are to be of the triple expansion type, and capable of giving a speed of 15 knots an hour. Cabin accommodation will be provided for 25 persons, in addition to officers and crew.

The Inner Harbor Association's annual meeting was held at Victoria, Jan. 9, when the report of the work done during the year was discussed. It was remarked that there was only one Government dredge at work on the coast, and as it was almost solely employed in maintaining a clear channel at New Westminster, it was decided to lay all the facts before the Government at an early date. The retiring officers were re-elected for the current year as follows: Chairman, G. A. Kirk; Secretary-Treasurer, T. C. Sorby; Board of Management, Capt. W. Grant, J. A. Sayward, A. J. Bechtel, Capt. Cox and Capt. Troup.

The Puget Sound Navigation Co., the International Steamship Co., and the Straits Steamship Co., subsidiary companies of the Alaska Steamship Co., have been merged, and will in future be operated under one management. The new schedule shows that the Chippewa will be operated on the Seattle-Victoria route, the other vessels being operated entirely in U.S. territory. The officers of the new company are: President and General Manager, J. Green; Vice-President, C. E. Peabody; Secretary-Treasurer, C. H. J. Stoltenberg; Assistant General Manager, C. G. Cocker; Superintendent, W. J. Cochrane; Port Engineer, C. F. Bishop.

Arrangements are under consideration for the sale of the North Vancouver ferry service to the corporation at a price of about $175,000. In the event of the proposition being carried through, it is understood that a new steamer, with a speed of 16 miles an hour, will be ordered, and a schedule of three round trips an hour adopted. The present steamer, North Vancouver, will be used as an alternate one, and the St. George will be altered and utilized as a freight carrier. The service is operated by the North Vancouver Ferry and Power Co., and a description, with plans of the steamer North Vancouver, was given in our April, 1904, issue.

The Union Steamship Co. of British Columbia's new steamship Cariboo, which is now nearing completion at Troon, Scotland, is a steel, twin-screw vessel of 1,500 tons, and is specially designed and constructed for the B.C. coasting trade. She is constructed under Lloyd's special survey, and all the requirements of the British Board of Trade and Canadian Steamboat acts. She is divided into four distinct watertight compartments, and the bunkers are so designed that they can be converted into tanks, should it subsequently be decided to utilize oil, instead of coal, as a fuel. The passenger accommodation is arranged as follows: on the boat deck, first-class smoke room, with captain's and chart rooms, and pilot house forward; ladies' music room, aft; also main cabin, 130 ft. long, 40 staterooms, lavatories, bathrooms, and cardroom, with purser's quarters; on the main deck, dining saloon to seat 60, with cook's galley, and engineers' quarters, aft; on the orlop deck, accommodation for logger and Indian passengers, with crew's quarters. The principal dimensions are: length, over all, 175 ft.; breadth, 36 ft.; draft, light, 7 ft. 9 ins., loaded, 11 ft. 3 ins.; with triple expansion engines, having a speed of 13 knots an hour.

Northern Navigation Company of Ontario.

Following are extracts from the 9th annual report for 1907 presented at the shareholders' meeting in Toronto Jan. 28:

"Navigation opened on Lake Superior on April 22 and on Georgian Bay on April 29, which was about one week later than in 1906, with fair prospects for the season's business, although we were one passenger steamer short, and had to take the steamer Majestic off the Mackinac route, and put her in place of the steamer Monarch on the Lake Superior route, which it was thought would materially reduce the gross earnings, and there was a falling off in the passenger business of about $6,000, but this was overcome by having the new freight steamer Doric, and an increase in freight business of about $33,000, or an actual increase of about $27,000 in gross earnings, while our total expenses increased about $20,000, leaving a net increase in earnings of about $7,000. We are pleased to report that we did not have any serious accidents during the past year

"In 1906 nine steamers appeared in our balance sheet, valued at $750,000. In 1907 it shows a fleet of 10 steamers valued at $905,696. This difference is made by the purchase of the Doric and some improvements to the Ionic. The gross earnings of the steamers is $633,870.58, and the expenditure $492,089.27, leaving a net balance of $141,781.31, which with the balance at credit of profit and loss account in 1906, dividend on stocks and bonds, and the amount collected for claims written off, makes a total of $184,489.54. This account was charged during 1907, with claims for 1906, $6,628.36; interest on overdraft in bank caused by the purchase of the Doric, $2,560; balance of the linen and freight carriers, $2,000, which closes this account; and written off Soo coal bin and piano account, $659.98, leaving a balance at credit of profit and loss of $172,641.20. Out of this amount your directors have appropriated $1,295 for interest on renewal and insurance funds set aside a year ago; renewal fund, $26,600; marine insurance fund on Georgian Bay steamers, $7,000; repairs and maintenance, $14,550, and dividend at the rate of 8%, $67,200, which leaves a balance to be carried forward at credit of profit and loss, $55,996.20. The reserve funds are as follows:

Renewal account	$ 52,475.00
Marine insurance fund	14,420.00
At credit profit and loss account	55,996.20
A total of	$122,891.20

"The percentage of expenses to gross earnings, not including claims paid for previous years, are as follows: 1903, 94.16%; 1904, 89.71%; 1905, 80.73%; 1906, 77.73%; 1907, 77.63%.

"The steel steamer Doric, formerly Tadousac, which was purchased to put on the route between Midland, Collingwood, Owen Sound and Lake Superior ports, has proved a valuable acquisition to our fleet, she having taken care of a large amount of freight and shown a very satisfactory profit on the investment. At different times during the past six years outside steamers had to be called into service to take care of the extra tonnage which accrued to the different ports, which indicates the advisability of our considering the acquiring of another freight steamer in the near future.

"Your directors are pleased to report that a satisfactory agreement between this company and the G.T.R. and the G.T. Pacific Ry. Co. has been entered into, covering a period of years from Jan. 1, 1909, whereby the railways agree to deliver to the Northern Navigation Co. their entire passenger and freight lake and rail traffic between Sarnia and Port Arthur, Fort William and Duluth, and the navigation company has contracted to build a steamer of the Huronic's type, to take care of this business, which is sure to grow as soon as the G.T. Pacific Ry. has its western lines built. The new ship when completed will be the largest, fastest and best appointed vessel on the Great Lakes, and should the railway company require another ship of the same class, the term contract between the railway company and the navigation company is to be extended for another period of years from the putting into commission of the second ship. This agreement with the railway company is what your directors have been looking forward to, and what has been mentioned in our reports for the last two years, and with it the stockholders of the Northern Navigation Co. become assured of the permanency of their investment. A satisfactory arrangement for the building of the new steamer has been completed. It was considered by your directors that a ship better adapted for the lake trade could be constructed in this country. It was also considered that a closer supervision during construction could be made at a minimum of expense.

ASSETS.

Ten steamers	$905,696.12	
Buildings, furniture, etc.	13,821 36	$919,517.48
Fuel and supplies	23,566.23	
Insurance unexpired	12,318.00	
Insurance receivable	27,351 17	
Accounts receivable	44,079.33	
Stocks and bonds	$ 1,500.00	
Bank of Toronto	14,507.49	$ 123,322.2
		$1,042,839.7

LIABILITIES.

To Shareholders:		
Capital stock	$840,000.00	
Steamers renewal fund	52,475.00	
Marine insurance fund	14,420.00	
Repairs and maintenance	8,321.11	
Dividend payable	67,200.00	
Profit and loss	55,996.20	1,038,412.3
To the Public:		
Accounts payable		4,427.3
		$1,042,839.7

PROFIT AND LOSS ACCOUNT.

Balance from 1906	$ 42,099.41
Less appropriation for Directors, $380.00, and to Secretary-Treasurer's	

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salary, $500.00	$ 880.00	$ 41,219.41
Dividend on stocks and bonds		85.00
Claims written off 1905, since collected		1,403.82
Gross earnings of steamers	633,870.58	
Less total expenditure	492,089.27	141,781.31
		$184,489.54
Less claims 1906, paid 1907	$ 6,628.36	
Less interest on overdraft on account purchase of Doric	2,560.00	
Less written off, balance of special linen and freight carriers	2,000.00	
Less written off Soo coal bin and balance piano account	659.98	11,848.34
		$172,641.20

APPROPRIATIONS.

Interest one year on renewal fund of $25,000 at 3½%	$ 875.00	
Steamers renewal fund	26,600.00	
Interest one year on marine insurance fund, $7,000, at 6%	420.00	
Marine insurance, Georgian Bay	7,000.00	
Repair and maintenance	14,550.00	
Dividend at 8% per annum on paid-up capital	67,200.00	116,645.00
		$ 55,996.20

In the absence of H. C. Hammond, President, in Europe, Vice-President W. J. Sheppard took the chair at the annual meeting. The report was adopted with very little discussion. General Manager Gildersleeve gave some particulars as to the vessel to be built, as published in our Jan. issue. The Vice-President stated the company still had $160,000 of stock in the treasury out of the $1,000,000 of authorized capital, and that this would probably be issued in connection with the building of the additional vessel. It was not likely that the capital would require to be further increased in the near future. Acton Burrows suggested that the directors consider the question of paying dividends semi-annually instead of annually in future. The directors and officers for the current year, all of whom were re-elected, are: President, H. C. Hammond; Vice-President, W. J. Sheppard; other directors, Lt.-Col. Hon. J. S Hendrie, F. A. Lett, W. D. Matthews, H. B. Smith, C. E. Stephens, H. Y. Telfer, and C. D. Warren.

The Hudson's Bay Co. is reported to be having two stern-wheel steamboats built at Victoria, B.C.

Capt. G. C. Coles, Examiner for masters and mates, Collingwood, Ont., is delivering a series of marine lectures in Collingwood, under the authority of the Dominion Marine Department.

The Magdalen Islands Steamship Co. is offering its freight and passenger steamboat Amelia for sale. The Amelia carries about 400 tons dead weight, and has accommodation for 20 passengers.

The Montreal, Ottawa and Georgian Bay Canal Co.'s bill was brought before the House of Commons Railway Committee Jan. 23, but consideration was postponed on account of the Government not being ready to announce its policy in regard to the matter.

A press report states that the fleet and business of the Star Line Steamship Co., Ltd., which operates steam vessels on the St. John River, is being offered for sale. J. W. Smith, President of the company, recently said that there was no truth in the report that the C.P.R. was negotiating for the line.

The Mutual Transit Co., Buffalo, N.Y., it is reported, is arranging to run a line of steamers during the coming navigation season between Lake Michigan ports and Goderich, Ont. The steamers will be used almost entirely to carry export flour for transhipment. The Goderich town council has been asked to grant facilities for the construction of wharves, etc.

The Lurline Wreck.

Following is the judgment of Commander Spain, Dominion Wreck Commissioner, and Captains W. A. Wiggins and S. Crangle: "The steamship Lurline was a vessel of 78 ft. 8 in. long, 16 ft. 3 ins. beam, depth 7 ft. 8 ins., with a gross tonnage of 66 tons; she was owned by the Ontario Government and commanded by Capt. J. B. Forest, who holds a service certificate as master of a steamer on the inland waters. It appears from the evidence adduced that the Lurline left Sarnia, Ont., on the morning of Sept. 26, 1907, and arrived off the port of Goderich about 5 p.m. the same day, the whole run being made in daylight, and the obstruction which caused the casualty was also struck during daylight. The obstruction was a breakwater which was built by the Federal Government several years ago, and had been partly washed away and became submerged. It was, however, marked by a stake at each end, and in addition to this a gas buoy was at the south-west end. This buoy was red, and was placed on the wrong side of the channel; the fact of the buoy being in this position, however, did not in any way affect this particular casualty, as by the evidence the Captain himself gave, he was proceeding in the harbor on the old ranges. These ranges have been in operation for more than 20 years, are misleading, and lead a vessel immediately over the submerged breakwater. The court recommends that they should be immediately discontinued. New range lights were put in operation in 1905, and on June 13 of that year mariners were all advised as to the work being done; on Sept. 2, 1905, a further notice was sent out advising all mariners that new range lights had been established, and at the same time giving explicit directions as to entering the harbor; again on Sept. 20 of the same year mariners were advised that a portion of the breakwater had been carried away, and warning them to enter on the new ranges referred to above. These notices to mariners are sent to all Canadian Collectors of Customs, whenever any new aids to navigation are established, or when any danger is reported, and masters of vessels should enquire at the Customs House for these notices. Capt. Forest did not take the necessary precautions to possess himself of the latest information in regard to Goderich harbor, which could have been easily obtained from the last port the ship left, and the same information could also have been ascertained from the Coast Pilot Book, which book was actually on board the steamer at the time of the disaster. This officer was under the very mistaken impression that the aids to navigation at the entrance to Goderich harbor were exactly the same as they were when he last was there, between 15 and 20 years ago, and the casualty to the Lurline was caused by the indifference and negligence of the master in not supplying himself with the necessary information in regard to the aids to navigation which have been established in recent years, and which might have been so easily obtained. As far as the court has been able to ascertain, the previous record of Capt. J. B. Forest is a good one, but the court is unable to overlook the carelessness of this officer in not providing himself with the information above mentioned, and therefore feels constrained (more especially as at the time of the accident the weather was clear, and there was practically a calm sea), to suspend the service certificate as master of a steamer on the inland waters held by Capt. Forest for six months from Sept. 26, 1907, the date of the disaster."

The Dominion Canal Systems.

The expenditure on canals for the nine months ended Mar. 31, 1907, aggregated $1,835,061.27, of which $887,830.61 was chargeable to capital, $264,110.73 to income, $383,845.74 for staff, and $299,266.19 for repairs, the last two items being charged to revenue. The revenue derived from canals was $106,644.71, of which $92,310.51 was from hydraulic and other rents. By an order-in-council 1905, the system of toll collection was definitely abandoned in respect of all the canals, after having been experimentally abandoned during 1903 and 1904. A sufficient staff was retained to carry on the essential work of recording the traffic and for the collection of such other revenues as are derivable from the leasing of canal lands, water powers, etc. The Government expenditure on canals prior to and since Confederation on capital account amounts to $91,734,718.21, of which $20,593,866.13 was expended prior to Confederation; and from the consolidated fund to $24,495,624.73, making a total expenditure of $166,230,342.94. The total revenue derived from canals since Confederation amounts to $13,620,228.03.

The total traffic through the several canals during 1906 was 10,523,185 tons, an increase of 1,154,441 compared with 1905. The amount of tolls that would have accrued had they been in force is $360,673.05. The tonnage passing through the several canals was.

	1906	1905	
Sault Ste, Marie Canal	6,574,039	5,473,406	tons.
Welland Canal	1,201,967	1,092,050	"
St. Lawrence Canals	1,637,017	1,752,855	"
Trent Valley Canal	28,495	45,231	"
Ottawa River Canals	397,415	371,341	"
Rideau Canal	82,159	59,864	"
Murray Canal	27,727	29,421	"
Chambly Canal	498,939	447,069	"
St. Peter's Canal	76,327	81,077	"

The work of deepening the Sault Ste. Marie canal approaches to 31 ft. 5 in. below extreme low water mark is nearing completion. When finished a channel way 500 ft. wide at the upper entrance and 315 ft. wide at the lower entrance will be available. The approaches at the lower entrance are completed to that depth. An extension of 800 ft. with concrete superstructure at the south upper entrance pier is now completed.

The extensive improvement works being carried on at Port Colborne, the Lake Erie entrance of the Welland Canal, comprise the deepening of the approach to the canal to 22 ft., and the construction of two docks, with piers 200 ft. wide, upon which grain elevators will be erected for the transference of grain to vessels adapted to the canal navigation when required. In addition to the works undertaken by the Department of Railways and Canals, a breakwater, about a mile long, has been built, and another is being constructed across the entrance to the harbor by the Department of Public Works, which will also dredge out the area so contained, thus greatly increasing the accommodation and insuring safety at this important point.

The channelway through the Galops rapids, commenced ten years ago, has now, though not carried to the full depth of 17 ft. of navigable water originally projected, reached a point beyond which it is not proposed to go, and the work may be regarded as completed. A channelway has been excavated, 3,000 ft. long, 300 ft. wide, except at one point where the width is 248 ft., and it is expected that from 13 to 15 ft. of water, varying with the season, will be afforded by the works now executed.

On the Trent Canal the section, 9½ miles comprising the new hydraulic lift lock at Ashburnham (Peterborough), was formally opened for traffic in June, 1904 A second hydraulic lift lock to overcome a rise and fall of 54 ft. is comprised in the Balsam-Simcoe Lake division of the canal, which has now been completed and taken over from the contractors. A 6-ft. navigation is thus afforded from Lake Simcoe to Heely's Falls, a distance of 160 miles, leaving the portion between Heely's Falls and Lake Ontario, and the portion from Lake Simcoe to Georgian Bay, still to be dealt with. The total distance between the Bay of Quinte, Lake Ontario and Georgian Bay, is about 192 miles. During the year 1905-6 the surveys carried on with a view to determining the most desirable route for those portions of the projected work that still remain to be constructed in order to give communication between Lake Ontario and Georgian Bay were completed. The surveys covered the northerly district between Lake Couchiching and Georgian Bay, also the district to the south between Rice Lake and Ontario, having in view as the possible terminal point on the latter lake either Trenton, Cobourg or Port Hope, all three places having urged claims for that distinction. The final report of the engineer, with plans and estimates, was sent in Dec. 20, 1906, and after full consideration of the several important features of the case demanding attention before coming to a decision, the principal cost both of construction and maintenance (which included liability for unknown damages in the event of a diversion of the waters of the River Trent to meet the requirements of a new outlet at Cobourg or Port Hope), the needs of navigation embracing water supply and harbour facilities, and the potential water powers to be created—the all-river route by the River Trent, with outlet at Trenton, was finally adopted by an order-in-council of Feb. 19, 1907; the canal to be of such depth as to give 8 ft. 4 in. of water on the mitre sills of the locks. Plans of the east

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CANADIAN PACIFIC RAILWAY CO.

ISSUE OF NEW ORDINARY CAPITAL STOCK

NOTICE is hereby given that pursuant to Resolutions passed at the Special General Meeting of Shareholders on 30th December, instant, an issue of $24,336,000 additional Ordinary Capital Stock of the Company, or 243,360 shares of $100 each, has been ordered by the Board of Directors.

The stock will be offered to the Shareholders of record at the closing of the books for the purpose, at par, on the basis of twenty per cent. (or one share in five), of their respective holdings.

The books of the Company will be closed for this purpose in London, New York and Montreal at 3 p.m. on Monday, Jan. 13th, and reopened on Monday, 27th January, 1908.

The right to subscribe will expire at 3 p.m. on Wednesday, Feb. 19th, 1908.

Payments will be received at the Bank of Montreal, London, New York or Montreal as follows:

20 per cent. or $20 per share on subscription, on or before Feb. 19th, 1908.

20 per cent. or $20 per share April 21st, 1908.

20 per cent. or $20 per share June 19th, 1908.

20 per cent. or $20 per share Aug. 19th, 1908.

20 per cent. or $20 per share Oct. 19th, 1908.

An interest payment of one and one-quarter per cent. will be made in October, 1908, on instalments up to and including that of June 19th, 1908, which have been paid on the due dates, in accordance with the terms of the circular herein referred to. All shares of the issue on which instalments have been paid in full on the due dates will rank for the full dividend accruing for the half-year ending Dec. 31st, 1908.

Shareholders may, as a matter of convenience to themselves, pay any or all of the instalments before the due dates, and interest at the rate of five per cent. per annum will be allowed on amounts so paid in advance.

A circular containing the terms of subscription and payment and enclosing warrants of subscription will be mailed to the Shareholders after the closing of the books as above stated.

By Order of the Board,

CHARLES DRINKWATER,
Secretary.

Dated at Montreal, 31st December, 1907.

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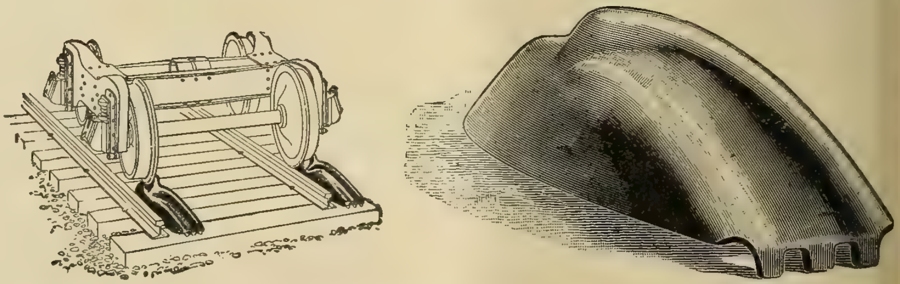
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branch of the Holland River from Holland Landing to Newmarket have been furnished by E. J. Walsh, with a view to the improvement of navigation, together with estimates of cost; also plans, profiles and estimates both for a 6-ft. and a 9-ft. navigation for the section between Georgian Bay and Lake Couchiching via Coldwater and the River Severn. Surveys are also being conducted for a route to the Georgian Bay via Kempenfeldt Bay, at the southwestern end of Lake Simcoe, and the River Nottawasaga.

Notices to Mariners.

No. 125. Nov. 25.—Quebec—328. River St. Lawrence below Quebec, changes in pilotage regulations. 329. River St. Lawrence, Trois Pistoles, light established.

No. 127. Dec. 3.—Ontario—338. Lake Huron, north channel, Manitoulin island, Little Current, change in site of back range light. 339. Georgian Bay, south side, Lockerbie rock, gas buoy changed. 340. Georgian Bay, east side, Waubuno channel, Lone rock, gas and bell buoy replaced by gas and whistling buoy. 341. Georgian Bay, east side, approach to Parry Sound, Three Star shoal, gas buoy changed. 343. Georgian Bay, east side, approach to Parry Sound, middle ground between Hall reef and Twin rock, gas buoy changed.

No. 128. Dec. 5.—British Columbia—344. Vancouver Island, east coast, Hammond bay, light established. 345. Queen Charlotte islands, Hecate strait, Skincuttle inlet, New England rock, gas and whistling buoy established. 346. Queen Charlotte islands, Hecate strait, Skidegate inlet, off Lawn point, gas and bell buoy established. Alaska—347. Revillagigedo channel, Spire island reef, beacon established.

No. 129. Dec. 10.—Nova Scotia—349. Cape Breton island, east coast, Glace bay, range lights established. Newfoundland—350. East coast, Fogo island, positions and particulars of shoals northeastward of.

No. 130. Dec. 12.—Nova Scotia—351. South coast, Island harbor, Harbor island, lighthouse established. 352. Cape Breton island, Gut of Canso, McMillan point, light improved. 353. Cape Breton island, south coast, Fourchu head, lighthouse established. Newfoundland—354. Southwest coast, Cape Ray, change in character of light postponed.

No. 131. Dec. 13.—Nova Scotia—355. North Atlantic Ocean, Sable island, characteristic of east end light.

No. 132. Dec. 14.—Ontario—356. River St. Lawrence, Prescott, gas-lighted beacon established. 357. Lake Superior, Jackfish bay, light established.

No. 133. Dec. 17.—New Brunswick—358. Bay of Fundy, change in character of light shown from Old Proprietor gas and whistling buoy. Prince Edward Island—359. East coast, Souris east, change in character of light.

No. 134. Dec. 17.—British Columbia—360. Vancouver island, west coast, Estevan point, temporary gas light established.

No. 135. Dec. 21.—Nova Scotia—361. Bay of Fundy, Minas Basin, Cobequid bay, Bass river, lighthouse established. 362. Cape Breton Island, south coast, off entrance to Louisburg harbor, submarine fog bells established eastward of harbor shoal.

No. 136. Dec. 27.—British Columbia—363. Vancouver Island, west coast, Pachena point, fog alarm established. 364. Cardero channel, Yuculta rapids, Gillard island, gas, lighted beacon established. 365. North Pacific ocean, Queen Charlotte islands, west coast, reef northward of Frederick island.

No. 137. Dec. 31.—New Brunswick—366. Bay of Fundy, Gannet rock, change in fog alarm. Newfoundland, Labrador—367. Belle Isle, south end, explosive fog signals to be used temporarily whenever fog alarm is inoperative. Quebec.—368. Gulf of St. Lawrence, Magdalen islands, Bird rocks, explosive fog signals to be used temporarily whenever fog alarm is inoperative.

The following notices have been issued by the U.S. Hydrographic office:

No. 51. Dec. 21.—2317. Detroit river, Limekiln crossing, east channel buoys discontinued.

No. 52. Dec. 28.—2360. Lake Erie, Buffalo, Niagara river range point light station, light moved. 2376. British Columbia, Queen Charlotte islands, Parry passage, hydrographic information, directions.

St. Lawrence and Chicago Steam Navigation Company.

The following report was presented at the 17th annual meeting in Toronto, Jan. 14: The season of 1907 on the lakes was, on the whole, a fairly good one. The new steamer E. B. Osler, which was to have been delivered last spring, will not be completed until about April 1 next. Your directors deemed it advisable to accept an offer received for the company's steamer Rosedale, and replaced her by building, in Scotland, the steamer G. R. Crowe, of larger capacity, which went into commission on the lakes early in October. In consequence of the delay in delivery of the E. B. Osler, and sale of the Rosedale, but little over half of the tonnage capacity, and the capital stock, was on an earning basis during the season of navigation. To meet the balance of the capital expended in building the E. B. Osler, it has been decided to issue $109,000 of new capital stock, and to offer same to shareholders at par.

Your directors, from the earnings of the season, have paid a dividend of 10%, and have carried forward $8,671.63 to the credit of profit and loss, and have written off the steamers, $22,700, leaving a balance at the credit of that account of $101,968.23.

ASSETS.

Four steamers, Algonquin, Iroquois, W. D. Matthews and G. R. Crowe	$600,000.00
Steamer E. B. Osler (building) expended to date	242,908.66
Insurance unexpired	7,500.00
Accounts receivable	36,313.74
	$886,722.40

LIABILITIES.

Capital	$751,000.00
Dominion Bank	33,754.17
Balance of profit carried forward	101,968.23
	$886,722.40

PROFIT AND LOSS.

Balance forward, Jan. 2, 1907		$115,996.60
Steamships earnings	$108,369.77	
Interest	5,559.15	
		113,928.92
		$229,925.52
Insurance	$19,765.25	
Cost of management, viz. Directors' and auditors' fees, salaries, taxes, office rent, etc	10,392.04	
		$ 30,157.29
Amount written off steamers		22,700.00
Dividend, 10%, payable Jan. 2, 1908		75,100.00
Balance carried forward		101,968.23
		$229,925.52

In the discussion on the report it was stated that the company's tonnage for 1908 will be 13,000 tons more than in 1907, and the total grain capacity of its vessels will be 850,000 bush.

The officers and directors for the current year are: President, W. D. Matthews; other directors, E. B. Osler, J. H. G. Hagarty, S. Crangle, C. S. Gzowski, G. F. Hagarty, G. R. Crowe, Jas. Carruthers.

For 1907 the net earnings were 15.17% on capital, against 21.31 in 1906, 22.17 in 1905, 14.31 in 1904, and 14.84 in 1903.

The 1,090 shares of new stock are being offered to shareholders at par, one share of new stock for each seven shares of old stock, to be paid in four instalments of 25% each, on the 1st of Feb., Mar., Apl. and May.

Niagara Navigation Co., Limited.

The following report for the year ended Nov. 30, 1907, was presented at the annual meeting in Toronto, Jan. 14: The new steamer Cayuga has been added to the company's fleet, and proved satisfactory. While the traffic has exceeded that of the previous season, the net earnings have been less owing to the cost of operating an extra steamer. Public appreciation of the improved service has been reflected in the gross receipts. Although the directors consider that the vessels and property are already upon the company's books at a conservative valuation, they have decided to write off an additional $25,000 from the profits of the year. After providing for the dividend, interest on debentures, writing off vessel property, etc., the balance to credit of profit and loss account stands at $129,692.16.

ASSETS.

Steamers	$909,725.33	
Less written off	25,000.00	
		$884,725.33
Real estate, wharves, etc		50,000.00
Stores		1,698.96
Accounts receivable		812.75
Cash on hand and in bank		54,084.55
		$991,321.59

LIABITITIES.

Capital stock authorized	$1,000,000.00	
Subscribed and paid		$701,700.00
Debentures outstanding, 4½%	125,000.00	
Accrued interest on same	2,343.75	
		127,343.75
Accounts payable		4,517.68
Dividend 4% payable Jan. 2, 1908		28,068.00
Balance at credit of profit and loss		129,692.16
		$991,321.59

PROFIT AND LOSS.

Balance Dec. 1, 1906		$123,953.79
Net earnings for year		100,325.99
		$224,279.78
Interest on debentures		5,572.50
Written off steamers, etc		25,526.16
Discount and charges on debentures issued		4,835.21
Interest on special bank account used for construction of steamer Cayuga		2,517.75
Dividend 4% paid July 2, '07	$28,068.00	
" 4% payable Jan. 2, 1908	28,068.00	
		56,136.00
Balance carried forward		129,692.16
		$224,279.78

The officers and directors for the current year, all of whom were re-elected, are: President, E. B. Osler; Vice-President, F. Barlow Cumberland; other directors, Hon. J. J. Foy, J. Bruce Macdonald, C. Cockshutt, W. D. Matthews, Col. J. S. Hendrie.

Following is a comparison of the profit and loss account with the previous year:

	1906	1907
Balance from previous year	$ 98,002.16	$123,953.79
Net earnings	123,724.63	100,325.99
Interest on debentures	4,995.00	5,572.50
Written off steamers	33,606.25	25,526.16
Written off real estate, etc	3,035.75	....
Dividends	56,136.00	56,136.00
Balance forward	123,953.79	129,692.16

Following is a comparison of earnings: 1907, 14.29%; 1906, 16.95%; 1905, 13.91%; 1904, 10.37%; 1903, 11.68%; 1902, 7.29%; 1901, 15.75%.

The G. T. Pacific Ry. is arranging for the construction at Victoria, B.C., of a large stern-wheel steamboat to run between Essington and Hazleton on the Skeena River. The engines and boilers, it is reported, are to be constructed at the Polson Iron Works, Toronto

Montreal Harbor Statistics.

The reports of trade passing through Montreal harbor, which were placed before the Harbor Commission recently, showed that though there were increases in both imports and exports, there was a decrease in the number of vessels trading with the port. There was also a considerable increase in revenue, chiefly due to imports, the total increase over the previous year being $25,830, of which $20,000 was due to the increased imports. The totals for the year from the opening of navigation to Dec. 31 were:

	1907	1906
Imports	$225,000.00	$209,000.00
Exports	95,500.00	91,500.00
Local traffic	54,330.60	48,500.71
Total	$374,830.60	$349,000.71

Number of steam and sailing vessels arriving in port, with tonnage, during 1907, compared with 1906:

	1907		1906	
	No.	Tonnage.	No.	Tonnage
Steam	742	1,925,986	787	1,961,859
Sailing	....	....	33	11,364
Total	742	1,925,986	820	1,973,223

That no ocean-going sailing vessels used the port during the year is explained by the fact that the cargoes of sugar, etc., inward and lumber outward shipped under sail in former years are now monopolized entirely by steamers. Of oversea vessels arriving during the year there was a decrease of 18, as compared with the previous year. The business of the lower ports was: entered, 321 vessels, all classes, 531,189 tons; cleared, 93 vessels, all classes, 61,350 tons; against 376 vessels, 590,935 tons, entered, and 101 vessels, 72,967 tons, cleared, during 1906. The total importation of coal by the St. Lawrence route was 1,555,504 tons, compared with 1,655,454 tons in the previous year. During December there was an average depth of water in the 30 ft. harbor channel of 33 ft., and in the 27½ ft. channel of 29 ft. 10 ins., as compared with a depth of

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Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary and business corporations. Specific terms may be obtained by addressing the Company at any of its offices.

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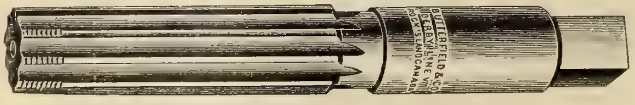

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40 ft. 1 in. in the 27½-ft channel in 1906. The opening of navigation was unusually late owing to ice conditions, and it was not until May 2, that the first vessels arrived in the harbor. The first vessel to enter the Gulf for the season was the Pelican from Great Britain, en route to the lakes, and the last to enter was the Dunelm, also from Great Britain for the lakes.

Dominion Aids to Navigation.

The total number of light stations and lightships in the Dominion, according to the recently issued report of the Department of Marine, is 901, and lights shown 1,145; the number of steam whistles, fog horns, bells and guns, 122; the number of lightkeepers and engineers of fog alarms with masters of lightships is 908. During the period covered by the report—nine months ended Mar. 31, 1907—62 light stations were established in all, and nine fog alarm stations; 29 buildings were erected at existing light stations, and four fog-alarm buildings were erected at existing stations. The districts provided with buoys and beacons number 375 with about 4,250 buoys of various kinds. In most cases the buoys are looked after by contractors, and there are 210 such contracts. In places where there is no contract the buoys are looked after by the harbormaster. The number of gas buoys maintained in the Dominion, showing in general occulting lights, are: In the Quebec agency, 24; on the St. Lawrence River, between Platon and Montreal 57; between Montreal and Kingston, 39; Lake Erie, 2; Georgian Bay, 14; Goderich, 1; River Thames, 1; Southampton, 1; Lake Nipissing, 1; Port Arthur and Fort William, 3; in Nova Scotia, 17; New Brunswick, 25; Prince Edward Island, 5; British Columbia 8. The coast buoy service maintained by the Dominion steamers covers:

NOVA SCOTIA:—Whistling buoys. 18; gas buoys, 3; bell buoys, 29; steel can and conical buoys, 182; combined gas and whistling buoys, 12; combined gas and bell buoys, 2.

NEW BRUNSWICK:—Whistling buoys, 5; gas buoys, 25; bell buoys, 15; steel can and conical buoys, 110.

PRINCE EDWARD ISLAND:—Whistling buoys, 3; gas buoys, 5; bell buoy, 1; steel can and conical buoys, 4.

QUEBEC:—Whistling buoy, 1; gas buoys, 81; bell buoy, 1; unlighted buoys, 245.

BRITISH COLUMBIA:—Whistling buoys, 3; gas buoys, 8; steel can and conical buoys, 37.

Sick Mariners' Fund.

Under the provisions of chap. 76 of the Revised Statutes of Canada, dues of 2 cents per ton register are levied on every vessel entering any port of the Province of Quebec, Nova Scotia, New Brunswick, Prince Edward Island and British Columbia, the money thus collected forming the Sick Mariners' Fund. Vessels of 100 tons register and less pay the duty once in each calendar year, and vessels of more than 100 tons register, three times in each year. By an amendment passed in 1887, chap. 40, it was provided that no vessel not registered in Canada, and which is employed exclusively in fishing or on a fishing voyage, shall be subject to the payment of this duty. The Sick Mariners' Act does not apply in Ontario. The fund is administered by the Department of Marine.

The receipts for the fiscal year ended Mar. 31, 1907, were: Nova Scotia, $13,560.63; New Brunswick, $9,999.40; Quebec, $8,825.30; British Columbia, $12,372.40; Prince Edward Island, $137.08. Total, $44,894.81; less refunds, $190.22; net $44,704.59. The expenditures were: Nova Scotia, $13,926.07; New Brunswick, $5,319.67; Quebec, $9,009.70; British Columbia, $5,792.99; Prince Edward Island, $1,576.78; shipwrecked and distressed seamen, $793.56; and expenses for printing and stationery brought the total up to $37,362.11.

In Nova Scotia marine hospitals are maintained at Louisburg, Yarmouth, Pictou, Sydney, Lunenburg, and Point Tupper. At Halifax, provision is made for the care of sick seamen at the Victoria General Hospital under arrangement made with the managers, by which $1.20 per day is allowed for board and medical attendance. Marine hospitals are maintained at Douglastown and Bathurst, N.B. At St. John, sick seamen are cared for at the General Public Commissioners' Hospital under an arrangement made by the Department by which $1.20 a day is paid for board and medical attendance on each seaman. Sick seamen are cared for at the Charlottetown and Prince Edward Island hospitals under arrangements made with the managers. At the port of Quebec sick seamen are cared for at the Jeffrey Hale and the Hotel Dieu hospitals, an allowance of $1.20 per day being made; a similar allowance is made for sick seamen cared for at the General and Notre Dame hospitals, Montreal. The Marine Hospital at Victoria, B.C., has in attendance a medical superintendent with a salary of $300 a year, and a keeper whose salary is $500; there is also an allowance of $5 a week for the board and attendance of each seaman. At the ports in these five provinces where no hospitals are established sick seamen are cared for under the chief officer of customs, when the vessel to which the seamen belong has paid dues according to law.

Department of Marine and Fisheries.

The Department of Marine and Fisheries issues its report in two sections, one dealing with marine interests and the second with the development and protection of the fishery interests of the Dominion. The Marine Branch of the Department undertakes a great variety of public service, including the construction of lighthouses and fog alarms; the maintenance of lights, gas buoys and other buoys; the Lighthouse Board, which decides the necessity for aids to navigation; the hydrographic surveys; the tidal surveys; the ship channel, St. Lawrence River, and Sorel works; meteorological and magnetic service; investigation into wrecks; board of steamboat inspection; cattle shipments inspection; wireless telegraph service; signal service; life saving service; marine hospitals; submarine signalling; shipping under the Merchants' Shipping Act; legislation and administration of laws relating to the Department of Marine and Fisheries; humane service in connection with seamen; wrecking plant subsidized; winter communication; removal of obstructions to navigation; examination of masters and mates and issuing certificates; naval militia; pilotage; government of ports and proclaiming of harbors in the Dominion; control of Government wharves; Dominion steamers, Marine and Fisheries; Hudson Bay navigation.

For the nine months ended Mar. 31, 1907, the total expenditure of the Department was $4,331,255.47, of which $693,685.65 was on account of the Fisheries Branch. The $3,637,569.82 expended by the Marine Branch was distributed over the following services:

Maintenance of lights	$ 842,820.66
Construction of lights	1,159,906.40
Ocean and river service	669,717.04
Hydrographic surveys, scientific institutions and St. Lawrence River ship channel	785,698.02
Marine hospitals, steamboat inspection, civil government	154,427.70
Reorganizing system of bookkeeping	25,000.00
	$3,637,569.82
Total appropriations	4,029,482.25
Expenditure less than appropriation	$ 391,912.43

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The Canadian Northern Telegraph Co. has completed the construction of its line into Regina, Sask.

Among the Express Companies.

B. S. Murray, Inspector Canadian Ex. Co., London, Ont., was presented with a club bag recently by the members of the Canadian Express Mutual Benefit Society in the city.

Mrs. Fishwick, widow of F. W. Fishwick, the founder of Fishwick's Express, and one of the pioneers of express business in the Dominion, died at Halifax, N.S., Jan. 13. After the death of her husband, Mrs. Fishwick continued the express business, which was absorbed by the Eastern Express Co., that, by the Intercolonial Express, and the last, in turn, by the Canadian Express Co.

Replying to a question in the House of Commons recently the Minister of Railways said the Government had received complaints from Charlottetown, P.E.I., respecting the rates charged by the Canadian Ex. Co.; from the North Queens and Caledonia Boards of Trade respecting the rates charged by the Maritime Ex. Co.; from a merchant at Sydney, N.S., respecting express rates on lobsters; from a merchant at St. John, N.B., respecting express rates on fruit, and from the Sackville, N.B., Board of Trade respecting express rates generally. The Government had also received a copy of resolutions passed at the last meeting of the Maritime Boards of Trade asking for relief from the charges imposed by the express companies. The question of tolls charged by these companies, added the Minister, comes under the Board of Railway Commissioners.

Telegraph and Cable Matters.

The Dominion Telegraph Co. recently declared its usual quarterly dividend at the rate of 6% per annum.

The Dominion Wireless Telegraph Co. is reported to have recently exchanged messages between its station at Victoria, B.C., and steamships off Point Arena on the California coast, a distance of over 600 miles.

The U.S. Government has arranged to erect a second wire on the telegraph line between Valdez and Fairbanks, Alaska, and to reconstruct the Yukon Valley line, which extends to Eagle City, on the International Boundary.

The Edmonton, Alta., Board of Trade has forwarded a petition to the Dominion Minister of Public Works, asking for the extension of the Government telegraph line from Athabasca Landing to the Lesser Slave Lake and Peace River crossing.

A German wireless telegraph company claims to have transmitted messages between Nauen, near Berlin, Germany, and Cap Blanco, Canary Islands, a distance of about 2,290 miles. This is about 300 miles farther than the distance betwen the Marconi stations at Glace Bay and Ireland.

The Dominion steamer Petrel has returned to New Westminster, B.C., after laying seven stretches of cable to connect Vancouver Island with some of the smaller islands. The islands connected by means of these cables are Salt Spring Island, Pender Island, Denman Island and Hornby Island, each stretch of cable being about two miles long.

G. Marconi sailed for England by the Allan Line steamship Tunisian, Jan. 4. On leaving Canada he stated that on his return in March he would make an announcement regarding the trans-continent project. At present, the idea is to erect stations at Winnipeg and Vancouver, and later, one at Hong Kong, as an additional step to the encircling of the world.

G. Marconi stated recently that the wireless telegraph system between Canada and Great Britain was now on a commercial basis and could be counted as a success. Press messages only were being dealt with at present, and the operators were transmitting about 2,000 words daily for a dozen newspapers. The system would, he believed, be open for public use by February.

The policy of adopting wireless telegraphy on passenger steamers was strongly advocated by J. Thom, Manager of the Dominion Steamship Line, in an interview recently. He stated that it had been of great assistance to vessels navigating the St. Lawrence under adverse weather conditions, and that only one or two minor accidents had occurred to vessels coming up to Montreal during the season.

The Dominion Government wireless telegraph station at Pachena, B.C., has been completed, and the stations at Cape Lazo and Estevan are being equipped with apparatus. Stations at Victoria and Point Grey were previously completed. The whole five stations were expected to be opened for business Jan. 30. The C.P.R. steamships Empress of India, Empress of China, Empress of Japan and Monteagle, and the B.C. Salvage Co.'s tugs Salvor and William Joliffe are being equipped with wireless telegraph apparatus.

The Board of Arbitration, consisting of Prof. Adam Shortt, Chairman; Wallace Nesbitt, K.C., on behalf of the company, and J. G. O'Donoghue, representing the operators, appointed at the instance of the G.T.R. to enquire into the telegraph operators'

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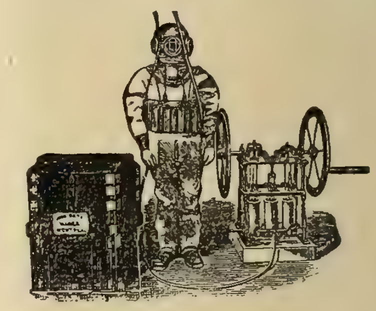

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grievances, has recently issued its award. By it the operators on the lower grade, as to salaries, will receive an increase of 10%, involving an extra expenditure of $27,000 annually, and men on the higher rate of pay will benefit by the company setting aside $10,000 a year, to be distributed amongst them at certain stations. An allowance will be made for those who may be required to work on Sundays at any station where Sunday work is not the rule, but in no case can an operator earn more in the aggregate than those who must in any case work on a Sunday. The new arrangement will not apply to train dispatchers, but only to operators, and to those who fill the positions of operators and station masters.

The report of the Department of Public Works for the nine months ended Mar. 31, 1907, gives the latest figures to hand showing the extent of the telegraph lines in operation in the Dominion as follows:

Company.	Length of Lines, miles.	Length of Conductors, miles.	Offices.
G.N.W. Telegraph Co..	11,775	48,652	1,360
C.P.R. Telegraphs......	10,294	51,009	1,150
Western Union Telegraph Co....................	2,638	9,849	219
Dominion Government...	6,829	6,829	382

The C.P.R. telegraph's figures include two miles of underground lines with 57 miles of conductors, and the Western Union figures 28 miles of underground lines with 44 miles of conductors.

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The Dominion Telegraph Lines.

The Department of Public Works expended during the nine months ended Mar. 31, 1907, upon the Government telegraph lines $376,605.48. The revenue from the lines during the same period was $91,760.84. The Department at present controls over 7,000 miles of telegraphs, both inland lines and cables. Few land lines were constructed during the period under review. Some stretches of wire were strung in the Chicoutimi district and in some parts of Saskatchewan and Alberta, but the main work was the keeping in repair of the several lines, and their management, in order to serve the public, for the benefit of whom they were constructed, at points remote from the centre of business, and where private companies did not think the remuneration would be in direct ratio to the amount required for construction and operation. The cables have been kept in good condition by the officers and crew of the cable ship Tyrian. The duty of collecting the returns from these several telegraph lines, says the Deputy Minister in his report, is in some cases very arduous. Many of these lines are located in out-of-the-way places, where the amounts paid in are very small. On some stretches, especially on the coast of the lower St. Lawrence, where the lines are more for the purpose of signalling, etc., the operators receiving only very small pay, the returns are also very small.

The details in connection with the telegraph lines are contained in the report of D. H. Keeley, General Superintendent. The lengths of the lines in the different provinces, with number of offices and the number of messages sent during the nine months, is given below. The land lines are given in statute miles, and the cable in knots, but the Department in recording the total length of the lines treats a knot as a statute mile.

	Land Lines.	Cables.	Offices.	Messages.
Newfoundland....	14	....	2	....
Nova Scotia............	586½	24½	60	9.776
New Brunswick.......	76	11	16	3,220
Quebec..............	1,886	324½	125	20,145
Ontario...............	25½	17	10	1,217
Saskatchewan and Alberta...............	994	...	33	17,782
British Columbia..	813¼	2¼	68	20,191
Yukon....	2,467½	....	68	31,856
	6,862¾	379¼	382	104,187

The line from Port au Basque to Cape Ray, Nfld., is operated as heretofore under an arrangement with the Anglo-American Telegraph Co. The Barrington-Cape Sable line, 16 miles and 1¾ knots of cables, is leased to the Barrington Telephone Co., the lease being terminable at any time. In connection with the signal service a land line of 208 miles was erected in 1881 between Canso and Halifax, N.S., for a bonus of $16,000, and is maintained and operated by the Western Union Telegraph Co. without further cost to the Government. The Pelee Island line in Ontario is operated by telephone. About 65½ miles of branch lines with Edmonton, Alta., as a centre are operated by the Edmonton District Telephone Co. The Beuff Telephone system, 25 miles, is looked after by the Superintendent of the Banff National Park. The Vernon-Kelowna, B.C., line, 35 miles, is operated both as a telephone and a telegraph line. The repairs of the line to Cape Beale, on Vancouver Island, has been done jointly with the C.P.R. Telegraph Department since 1902 in connection with the work of the all-British Trans-Pacific Cable. The Vancouver-Salt Springs, B.C., line, 24¾ miles, is worked by telephone for the present merely for general convenience and is looked after by persons directly interested.

New lines constructed on Cape Breton Island, N.S., included one from Little Bras d'Or to Kempt Head, 31 miles of pole line and 36 miles of wire; one to Eskasoni, 31¼ miles of pole line and 37½ miles of wire; and a stretch of six miles along the previously existing line between Ball's Creek and North Sydney. Offices were opened for business on these lines at Little Bras d'Or, East Bay, Castle Bay, North Side East Bay, Alder Point, Hillside, South Side Boularderie, Point Clear, Grove's Point, Boularderie West, Little Bras d'Or Bridge, and Eskasoni. To relieve the pressure on the Meat Cove, N.S., wire a new wire was strung from North Sydney to Big Bras d'Or, with a loop to Alder Point, and crossing Little Bras d'Or with 400 ft. of cable. The office at Strathlorn was closed, and new offices opened on old lines at Laframboise Intervale, and Breton Cove, N.S. The main line between Mabou and Chitcamp has been completed, and the line between Gaberous and North Sydney overhauled and put in good repair. For the accommodation of the local telephone company on Grand Manan Island, N.B., a permit has been given by the Department for the stringing of a telephone wire, subject to the usual conditions, on the poles of the telegraph line throughout the whole length of the island. A cable has been laid from St. Francois, Isle of Orleans, to Baie St. Paul, 30 knots, with a view of a through connection to Quebec without having to lease a wire.

The officers of the Department in charge of telegraphs are: General Superintendent, D. H. Keeley; technical assistant, M. W. Crean; accountant, J. P. Demartigny; Ottawa. General Inspectors: A. B. McDonald, Meat Cove, N.S., lines in Nova Scotia and New Brunswick; J. S. Macdonald, Kamloops, B.C., lines in Saskatchewan, Alberta and South British Columbia; J. E. Gobeil, lines in Yukon Division. Superintendencies: E. Pope, Quebec, district superintendent, North Shore and G.N.W. traffic. J. C. Taché, district superintendent, Chicoutimi district and North Shore to Bersimis. E. H. Tetu, Long Point of Mingan, district superintendent, North Shore, East Bersimis. P. Pouliot, district superintendent, Quarantine line, etc., to Grosse Isle. A. Malouin, district superintendent, West Point, Anticosti Island. A. Le Bourdais, Grindstone, district superintendent, Magdalen Islands. D. C. Dawson, St. John, N.B., district superintendent, Cape Breton system. Mrs. C. C. Seely, Grand Manan, N.B., district superintendent, Bay of Fundy system. J. McR. Selkirk, Leamington, Ont., district superintendent, Pelee Island system. R. C. Macdonald, Qu'Appelle, district superintendent, Northwest Territories. W. Henderson, Victoria, district superintendent, British Columbia, south. C. S. Stevens, Kamloops, B.C., superintendent Penticton line. J. T. Phelan, Vancouver, B.C., acting superintendent, Yukon system. H. Gilchen, Whitehorse, Y.T., acting district superintendent, Atlin-Boundary.

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A Newfoundland Telegraph Dispute.

Judgment was recently delivered in the case of the Anglo-American Telegraph Co. vs. the Reid-Newfoundland Co., in which the plaintiff company claimed an account of commercial messages over the telegraph line between St. John's and Whitbourne, Nfld., under an agreement with the Newfoundland Ry. Co., dated Aug. 11, 1888, and of which it claims the Reid-Newfoundland Co. is the assign. The defendant company held that it was not an assign of the Newfoundland Ry. Co. in so far as this agreement was concerned.

The judgment states: "The defendant company, however, took the special wire from the Government under the contract of 1898, which conveyed an estate comprising the whole of the unexpired term of 27½ years, which the agreement gave in the special wire. If the special wire has not been conveyed by this contract, then the defendant company's occupation of it must be wholly wrongful, and it would be liable for every use made of it. The conduct of the defendant company, as well as its contract, shows it to be in the position of an assign. It conformed to the terms of the agreement of 1888 and took its benefits. From April 1, 1898, it held the special wire with the owner's consent and must be presumed to have done so on the terms set forth in the agreement."

The original agreement with the Newfoundland Ry. Co. provided that the special wire referred to was for the special and exclusive use of the Ry. Co., and to be so constructed and maintained as to afford the Ry. Co. constant communication between each of the railway stations, between St. John's and Harbor Grace, and Harbor Grace and Carbonear. Commercial messages were held to be all business messages paying toll, or contributing to the earnings of the company. It was ordered that account be taken before the Registrar of all messages transmitted over the special wire by Sir R. G. Reid, and the defendant company, other than messages connected with, or for purposes incidental to the management, operation or control of the line of railway between St. John's and Harbor Grace, via Whitbourne, and between Harbor Grace and Carbonear.

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Telephone and Telegraph Crossings.

The Railway Act, sec. 246, provides that no wires for telegraphs, telephones or the conveyance of light, heat, power or electricity shall be erected, placed or maintained across a railway without leave of the Board of Railway Commissioners. Subsections provide for the submission of plans to the Board; the making of an order by the Board authorizing the work on such terms and conditions as may be expedient, and for the carrying out of the work under the order. Replying to a question in the House of Commons recently the Minister of Railways said the total number of applications made to the Board of Railway Commissioners for leave to cross railway tracks with telephone wires from Feb. 1, 1904, to Dec. 1, 1907, was 1,384, and the total number of applications granted was 1,365. No applications had been refused within that period. Provided the applicant complied with the requirements of sec. 246 of the Railway Act, and the rules and regulations of the Board, and provided a public hearing was not asked for, and the applicant be ready to accept an order in accordance with the standard conditions and specifications for telephone crossings approved by the Board (see pg. 529, Sept., 1906), and provided the Board's Engineer approves of the plan, and profile filed, the application should be granted within three weeks of its being received by the Secretary of the Board. Should, however, a written consent to the crossing be filed on behalf of the railway company whose lines are to be crossed, then an order might issue within a shorter period, and in cases of urgency the order would be issued forthwith.

J. Barr, M.P., who asked the question in the House, subsequently introduced a bill to amend the section referred to, by authorizing the Board to make general regulations respecting the construction of telegraph, telephone, power transmission or other wires across, or watermains under, railways. Subsections provide that any person desiring to do work under the regulations shall give notice in writing to the railway company, and in the event of the railway company not serving a restraining order from the Board of Railway Commissioners within ten days the work may be proceeded with. If a restraining order be obtained, plans must be submitted to the Board, which shall determine the terms and conditions under which the work may be done. The notice will be deemed to be properly served by delivery to any station agent of the railway company in the municipality in which it is proposed to undertake the work, or upon the nearest station agent. No fee for the supervision of the work shall be payable by any municipal corporation, telegraph or telephone company, but $3 a day shall be payable to the railway by any person or corporation carrying a watermain under the tracks for supervision by the company's engineer.

◆

The Brotherhood of Railway Trainmen elected the following officers for the current year at a meeting held Jan. 14, at Montreal: Chairman, G. McGovern; Vice-Chairman, C. Anderson, Brownville, Me.; Secretary, H. Dart, Smith's Falls, Ont.

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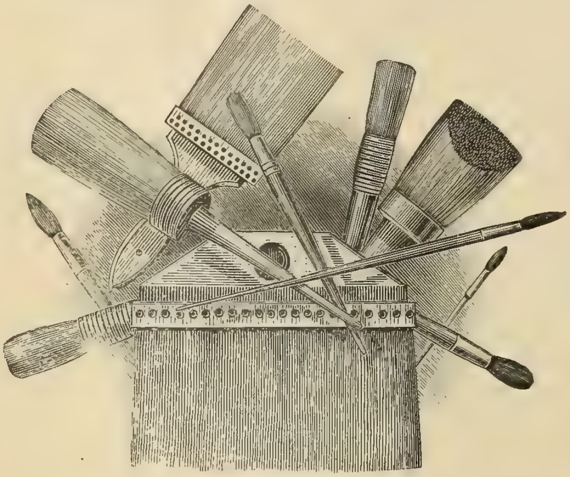

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Montreal Telegraph Company.

The annual meeting was held Jan. 10, and H. A. Allan, President; A. T. Paterson, Vice-President; W. McMaster and W. R. Miller, directors, were re-elected for the current year. The company's property is maintained and operated by the Great North-Western Telegraph Co. of Canada, and the dividend is guaranteed by the Western Union Telegraph Co., of New York, under an agreement, for 97 years from 1881. The guaranteed dividend has been distributed quarterly, and a payment of 10c. a share to shareholders of record Sept. 30, 1907, was also made. The principal figures in the balance sheet for the year ended Dec. 31 are as follows:—

ASSETS.

Telegraph lines in Canada and U.S. . .	$1,625,890.00
Telegraph cables in Canada and U.S. .	33,487.39
Telegraph offices and equipment in Canada and U.S.	212,500.00
Real estate in Montreal, Ottawa, Quebec and Toronto	279,946.46
	$2,151,823.85
Cash, accounts receivable, bonds and other securities, and real estate (not included in agreement with G.N.W.)	141,191.46
	$2,293,015.31

LIABILITIES.

Shareholders' capital		$2,000,000.00
Excess in value of property operated by the G.N.W.T. Co over shareholders' capital		151,823.85
Dividend payable Jan. 15.	$40,000.00	
Unclaimed dividends, etc. . . .	1,932.49	
Contingent fund	99,258.97	
		141,191.46
		$2,293,015.31

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General Telephone Matters.

The Bell Telephone Co. paid its quarterly dividend of 2% Jan. 15.

New Hamburg, Ont., has installed a telephone system with connections with the Bell Telephone Co.

The Bell Telephone Co. has completed the stringing of a second long distance line between Caledonia and Hamilton, Ont.

The Blenheim and South Kent Telephone Co. has now completed the erection of about 30 miles of line, and contemplates further construction in the near future.

G. H. Halse, heretofore Secretary of the British Columbia Telephone Co., Vancouver, B.C., has been appointed General Superintendent, succeeding H. W. Kent, resigned.

The Revelstoke, B.C., municipal council is contemplating the taking over of the local telephone service, which is at present operated by the British Columbia Telephone Co., Ltd.

The telephone line from Thetford Mines to Broughton Station, East Broughton, Robertson and Tring Jct., Que., has been connected up to the Bell Telephone Co.'s system.

The Yarmouth Amalgamated Telephone Co. has been granted supplemental letters patent under the Nova Scotia Companies Act, increasing its capital from $25,000 to $50,000.

A telephone company is being organized in Debec, N.B., with a capital of $5,000, for the purpose of installing and operating a telephone system in York and Carleton counties, N.B.

It was recently announced that the fund being raised for the purpose of erecting a memorial in Brantford, Ont., to A. G. Bell, the inventor of the telephone, has reached $38,295.

The Dunnville (Ont.) Consolidated Telephone Co. is issuing first mortgage gold bonds to the extent of $24,000, bearing interest at 6%, for the purpose of extensions in the territory already operated.

The Muskoka Independent Telephone Co. has been granted a franchise by Chaffey, Ont., and has received applications from Rosseau, Yearley and Sprucedale for extensions of the company's lines there.

There are reported to be some 50 free telephones in Winnipeg on the Bell Telephone Co.'s lines. The Government, on taking over the company's system in the Province, will require that all instruments be paid for.

The Nova Scotia Telephone Co., which recently took over the Yarmouth Telephone Co.'s plant, is making extensive improvements in the system in Yarmouth. The wires on most of the main streets have been placed underground and in other places new poles have been erected.

The Farmers' Telephone Co., Ltd., has been incorporated under the New Brunswick Companies Act, with a capital of $5,000 and office at Windsor, N.B., to instal and operate a telephone system in Carleton county, N.B. The provisional directors are: H. A. Smith, E. W. Spinner, G. O. Britton, E. A. Britton, and F. W. Smith, Windsor, N.B.

The Burnt River Telephone Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $5,000, and office at Burnt River, Ont., to carry on the business of a telephone company in Victoria county. The provisional directors are: W. Fell, J. Hodgson, A. B. Townsend, R. Maconachie, W. Britnell, Somerville; and S. Hughes, Lindsay, Ont.

The Caradoc-Ekfrid Telephone Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $10,000, and offices at Melbourne, Ont., to carry on the business of a telephone company in the townships of Caradoc and Ekfrid, Ont. The provisional directors are, A. B. McDonald, N. A. Galbraith, J. A. McEwen, Ekfrid, and F. L. Williams, T. W. Williams, Caradoc.

The Lansdowne Rural Telephone Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $20,000, and office at Lansdowne, Ont., to carry on a general telephone business in Leeds county, Ont. The provisional directors are: W. J. Webster, R. J. Mitchell, O. W. Landon, W. W. Shipman, H. Horton, C. Fredenburg, G. F. Deane, G. W. Steacy, and W. McConnell, Lansdowne.

The Vancouver, B.C., Board of Trade recently passed a resolution endorsing an application to the Dominion Government favoring the establishment of a telephone line between Vancouver and Point Atkinson. It has also been in communication with W. H. Kent, manager B.C. Telephone Co., with a view of the company constructing such a line. The proposal, the Board was informed, was under the consideration of the directors.

The North Western Telephone Co. is asking the Saskatoon, Sask., City Council to guarantee its 5% bonds to an amount equal to its fully paid-up stock, and also for an extension of its franchise for ten years, with a view to the reconstruction and extension of the system. If these proposals are carried out it is intended to have two city representatives on the directorate, and the city will have the right to purchase the system any time after five years.

◆

The Central Ontario Ry. has put in force a new passenger rate showing a maximum fare of 3 cents a mile between all stations. The tariff has been approved by the Board of Railway Commissioners.

Randolph Macdonald & Co., Ltd., having completed their several contracts in the Province of Quebec, have removed their head office from Three Rivers, Que., to the Crown Life Building, Toronto.

Bell Telephone Lines in Manitoba.

The correspondence between the Manitoba Government and the Bell Telephone Co. respecting the sale of the company's lines in the Province was laid on the table of the Legislature Jan. 6. The correspondence was opened by a letter from the Premier to the President of the Bell Telephone Co., Mar. 11, 1907, setting out the policy of the Government in regard to the construction of a provincial telephone system and inviting the company to consider the propriety of selling out its line to the Government. After correspondence and an interview the President, C. F. Sise, on behalf of the company, offered to sell to the Province its entire telephone business in Manitoba as a going concern from Jan. 15 for the consideration of $3,400,000 in approved 40 year bonds of the Province bearing interest at 4%. Among the conditions set out by the company to be included in the contract of sale are: the carrying out of existing contracts, the retention of present employes for at least a year; the right to construct a line through the Province to connect its Ontario and Saskatchewan lines; to provide for the interchange of business; the right to re-enter the Province for business in the event of the Government selling the lines now purchased to another company, or ceasing to operate them; and the giving of a preference, when terms and conditions are otherwise equal, in the purchase of supplies to the Northern Electric and Manufacturing Co., and the Wire and Cable Co., Montreal. O. F. French, Chief Engineer of the Provincial Department of Railways, Telephones and Telegraphs, presented a report on the system Dec. 28, and on Dec. 30, an order-in-council was passed recommending the acceptance of the company's offer, $3,300,000 being placed as the price of the lines, etc., and $100,000 as the value of supplies purchased for and charged to the Manitoba lines, and in store at various points.

The report of the Chief Engineer set forth that on Dec. 10, 1907, there were 14,195 instruments in Manitoba, 8,890 being connected with the Winnipeg exchange; 780 with the Brandon exchange and the remainder being distributed among 65 smaller plants, practically covering the whole telephone area of the Province. During the past season an addition of 2,000 cable pairs was made in Winnipeg, and with a comparatively small additional capital expenditure these could be made available for new subscribers, thus increasing the total capacity to 13,395. This cable capacity will take care of 50% more individual line telephones than are at present in use in the city, or on a party line basis it would be possible to about double the present subscription list. This will hold true in nearly every exchange in the system. Winnipeg and Brandon have subway systems which, with comparatively small additions, will be ample for several years. There are 1,397 miles of farm pole lines with a circuit wire mileage of 2,019 miles. Winnipeg exchange has 165 miles of pole lines covering Winnipeg and reaching out to St. James, Elm Park, St. Boniface, Elmwood and other points. The switchboards at Winnipeg and Brandon are of the common battery multiple type; the other exchanges are equipped with magnetic apparatus. The construction has been well done, and is up to modern practice generally; an exception to this is the use of the old type of Blake transmitter to some extent in a few of the smaller exchanges; these could be replaced by solid back transmitters, however, at a nominal cost. The physical plant is in a good state of repair, and is being kept so. The estimated

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(Late with R. W. Hunt & Co.)

THOS. C. IRVING, Jr.,
Secretary-Treasurer

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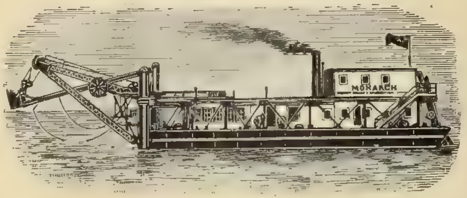

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CAPITAL PAID UP	4,880,000.00.
REST	4,880,000.00.

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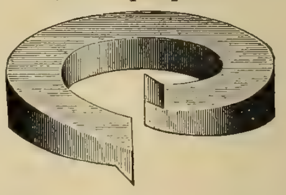

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value of the system, exclusive of supplies, was placed at $3,210,098, made up as follows:

Winnipeg plant	$1,584,000.00
All other exchanges and farm lines	712,500.00
1,192 miles long distance pole lines	333,780.00
331 long distance circuit miles, No. 10 (524 lbs.) copper at $143	,47,333.00
2,044 long distance circuit miles, No. 10 (346 lbs.) copper at $100	204,400.00
124 long distance circuit miles, No. 9 iron at $40	4,960.00
75 toll offices at $175	13,125.00
Engineering and real estate	310.000.00

In conclusion he said: "The average valuation of a telephone in the above estimate (taking Winnipeg for example) is $178.18. If the plant had reached its final growth this figure would naturally, and rightly, be considered high. On the contrary, the plant, as far as the office building, the principal conduit and pole lines are concerned, has been built to give service to nearly twice the number of telephones now in operation. Four thousand subscribers, I believe, represents a conservative estimate of a natural growth in Winnipeg during the next 18 months or two years. For these new telephones there would be required an additional investment of about $200,000, making the total investment with 12,890 telephones installed, $1,784,000, an average of $138.40 a telephone, as against the present average of $178.18. The conditions in Winnipeg reflect, on the whole, the conditions existing in the other exchanges. I estimate an increase of 2,500 telephones outside of Winnipeg in, say, two years, with an increase in first cost of $150,000. No estimate has been prepared of an increase in toll lines. The present lines can carry at least twice the present number of circuits. I estimate that, with an addition of one-third to the present toll line investment, the earning capacity will be doubled. And at the present rapid growth in population and in business it is only natural to assume that such a condition will come about in a few years."

A table appended to the report gave the switchboard capacity, in use and spare; the aërial cable capacity, in use and spare, and the available reserve for new subscribers at the several stations. The totals of these showed the percentage of switchboard lines in use to be 69.9, leaving 30.4% available for new subscribers; and the percentage of cable pairs in use to be 58.4, leaving 41.6% available for new subscribers.

At a special meeting of the Bell Telephone Co.'s shareholders in Montreal, Jan. 9, the following formal resolution was carried unanimously: "That the directors of the company be, and they are hereby authorized to sell and dispose of the property and assets, together with the business of the company in the Province of Manitoba, as a going concern, or any part of such property and assets on such terms and conditions and for such consideration as they may deem to be in the best interests of the company."

The management of the telephone system has been placed in the hands of a Commission, consisting of F. C. Paterson, W. H. Hayes and H. J. Horan, formerly Western Manager, Assistant Manager, and Chief Engineer, respectively, with the Bell Co. The whole system was formally handed over to the Commission Jan. 15.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
- Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Advertising Matter
- Valentine & Sons Publishing Co..........Montreal.

Aerated Waters
- E. L. Drewry.......................Winnipeg.

Air Brakes and Fittings
- Canada Foundry Co.....................Toronto.
- Canadian Westinghouse Co......Hamilton, Ont.

Ales
- E. L. Drewry.......................Winnipeg.

Augle Bars
- Hamilton Steel & Iron Co.......Hamilton, Ont.

Automobiles
- Polson Iron Works, Ltd ....Toronto.

Axes
- James Smart Mfg. Co...........Brockville, Ont.

Axe Steel
- Montreal Steel Works.................Montreal.

Axles
- James Hutton & Co....................Montreal.
- Jas. W. Pyke & Co....................Montreal.
- Rhodes, Curry & Co..............Amherst, N.S.
- Taylor & Arnold......................Montreal.

Badges
- R. Woodman Mfg. & Supply Co....Boston, Mass.

Baggage Checks
- R. Woodman Mfg. & Supply Co.....Boston, Mas .

Bearings, Side
- Chicago Railway Equipment Co.....Chicago, Ill.

Blankets and Bedding
- The Hudson's Bay Co.........................

Blasting Powder
- Standard Explosives Limited..........Montreal.

Boilers
- Babcock & Wilcox (Ltd.)..............Montreal.
- Canada Foundry Co.....................Toronto.
- Jno.McDougall,Caledonian IronWorks Co. Montreal
- Polson Iron Works.....................Toronto.
- Robb Engineering Co.............Amherst, N.S.

Boilers, Internally Fired
- Robb Engineering Co.............Amherst, N.S.

Boilers, Portable
- Canada Foundry Co.....................Toronto.
- Robb Engineering Co.............Amherst, N.S.

Boilers, Stationary and Marine
- Babcock & Wilcox (Ltd.)..............Montreal.
- Robb Engineering Co.............Amherst, N.S.

Boiler, Staybolt Iron or Steel Bars
- Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Boilers, Steam
- Babcock & Wilcox (Ltd.)..............Montreal.
- Robb Engineering Co.............Amherst, N.S.

Boilers, Water Tube
- Babcock & Wilcox (Ltd.)..............Montreal.
- Jno. McDougall,Caledonian Iron Works Co.Montreal
- Robb Engineering Co.............Amherst, N.S.

Boilers Tubes
- Jas. W. Pyke & Co....................Montreal.

Bolsters
- Dominion Car and Foundry Co........Montreal.

Bolts, Bridge
- Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
- Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
- Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
- Mussens Limited......................Montreal.

Brake Beams
- Chicago Railway Equipment Co......Chicago, Ill.
- Dominion Car and Foundry Co........Montreal.

Brake Shoes
- American Brake Shoe & F'dry Co..Mahwah, N.J.
- Canadian Iron and Foundry Co........Montreal.
- N. J. Holden Co., Ltd................Montreal.
- Railway Materials Co............... New York.

Brass and Copper Cloth
- The B. Greening Co............. Hamilton, Ont.

Bridge Numbers
- Acton Burrows Limited ....Toronto.

Bridges
- Canada Foundry Co....................Toronto.
- Canadian Bridge Co...........Walkerville, Ont.
- Dominion Bridge Co...................Montreal.
- Steel Concrete Co. (Ltd.)..............Montreal.

Buckets, Coal, Ore and Concrete
- Kilgore-Peteler Co...........Minneapolis, Minn.

Bumping Posts
- McCord & Co.......................Chicago, Ill.
- Mechanical Mfg. Co.................Chicago, Ill.

Buoy Lighting
- Safety Car Heating and Lighting Co..New York.

Cables, Electric and Feeder
- E. F. Phillips Electrical Works, Ltd.....Montreal.
- The Wire and Cable Co...............Montreal.

Caboose Heaters
- Geo. R. Prowse......................Montreal.

Car Castings
- American Brake Shoe & F'dry Co...Mahwah, N.J.
- Canadian Iron and Foundry Co........Montreal.

Car Cleaner
- Modoc Soap Co...............Philadelphia, Pa.

Car Closets
- Duner Co.........................Chicago, Ill.

Car Curtains and Fixtures
- N. J. Holden Co., Ltd................Montreal.

Car Heating
- Wm. C. Baker Heating & Supply Co..New York.
- Canadian Gold Car Heating & Lighting Co.Montreal.
- Safety Car Heating and Lighting Co...New York.
- Peter Smith Heater Co............Detroit, Mich

Car Jacks
- F. H. Hopkins & Co...................Montreal.
- Mussens Limited......................Montreal.

Car Kitchen Equipments
- Geo. R. Prowse......................Montreal.

Car Lighting
- Bliss Electric Car Lighting Co...Milwaukee, Wis.
- Consolidated Ry. Electric Light. & Equip. Co., N.Y.
- Canadian Cold Car Heating & Lighting Co.Montreal.
- Safety Car Heating and Lighting Co...New York.

Car Movers
- F. H. Hopkins & Co...................Montreal.
- Mussens Limited......................Montreal.
- R. Woodman Mfg. & Supply Co ....Boston, Mass.

Car Ranges
- Geo. R. Prowse.......................Montreal.

Car Replacers
- Alexander Car Replacer Mfg. Co....Scranton, Pa.
- N. J. Holden Co., Ltd.................Montreal.
- F H. Hopkins & Co...................Montreal.

Car Seals
- R. Woodman Mfg. & Supply Co....Boston, Mass.

Car Wash Brushes
- Wolfe Brush Co...................Pittsburg, Pa.

Cars
- Canada Car Co., (Ltd) ....Montreal, Que.
- Crossen Car Mfg. Co.............Cobourg, Ont.
- Dominion Car and Foundry Co........Montreal.
- J. T. Gardner ....Chicago, Ill.
- Hart-Otis Car Co. (Ltd.) ....Montreal.
- Kilgore-Peteler Co...........Minneapolis, Minn.
- Rhodes Curry & Co...............Amherst, N.S.

Cars, Coal
- Kilgore-Peteler Co...........Minneapolis, Minn.

Cars, Mine
- Kilgore-Peteler Co...........Minneapolis, Minn.

Car Windows
- O. M Edwards...................Syracuse, N.Y.

Castings
- Crossen Car Mfg. Co.............Cobourg, Ont.

Castings, Brass
- Canadian Bronze Co..................Montreal.
- Canadian Iron and Foundry Co........Montreal.
- Kerr Engine Co.................Walkerville, Ont.
- St. Thomas Brass Co..........St. Thomas, Ont.

Castings, Iron
- Canada Car Co., Ltd..... ....Montreal.
- Canadian Iron and Foundry Co........Montreal.
- Kerr Engine Co.................Walkerville, Ont.

Castings, Iron and Steel
- American Brake Shoe & F'dry Co ..Mahwah, N.J.

Castings, Malleable
- Taylor & Arnold......................Montreal.

Castings, Steel
- Canadian Iron and Foundry Co........Montreal.
- Montreal Steel Works.................Montreal.
- Rhodes Curry & Co...............Amherst, N.S.

Cast-Steel Hammers
- American Brake Shoe & F'dry Co ..Mahwah, N J.

Cast-Steel Track Tools
- American Brake Shoe & F'dry Co...Mahwah, N.J.

Cast-Steel Wrenches
- American Brake Shoe & F'dry Co...Mahwah, N.J.

Cement Machinery
- Jas. W. Pyke & Co...................Montreal.

Chains
- B J Coghlin & Co....................Montreal.

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NOTICE is hereby given that the Grand Trunk Railway Company of Canada will apply to the Parliament of Canada, at the present session thereof, for an Act repealing or amending the provisions of section 3 of 16 Victoria, chapter 37, and particularly repealing so much of the section as provides that the fare or charge for each third-class passenger by any train on that portion of the company's railway between Montreal and Toronto shall not exceed one penny currency for each mile travelled, and that at least one train, having in it third-class carriages, shall run every day throughout the length of the line.

W. H. BIGGAR,
Solicitor for the applicants.

Dated at Montreal, this 18th day of December, A.D. 1907.

DIVIDEND NOTICE

THE NORTHERN NAVIGATION CO. OF ONTARIO, LIMITED.

NOTICE is hereby given that a dividend of 8 per cent. per annum for the year ending Dec. 31, 1907, has been declared upon the paid-up capital stock of the company; the same will be payable on Jan. 20, 1908, to shareholders of record Jan. 12. The transfer books will be closed from the 13th to the 28th of January, both days inclusive.

By order of the Board,

H. H. GILDERSLEEVE,
Manager.

Toronto, Dec. 31, 1907.

KINGSTON AND PEMBROKE RAILWAY COMPANY

NOTICE TO SHAREHOLDERS

THE Annual Meeting of the shareholders of this Company will be held on Wednesday, 12th day of February next, at the Head Office of the Company, in Kingston, at Eleven o'clock a.m., for the purpose of electing Directors, and transaction of other business.

The Stock Transfer Books will close in New York on Saturday, 1st day of February, at 1 p.m. All books will be re-opened on Thursday, 13th day of February.

ARCHIBALD McNAUGHTON,
Secretary and Treasurer.

Kingston, January 3rd, 1908.

J. J. O'CONNOR

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Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio

Chimneys
Steel Concrete Co. (Ltd.)..............Montreal.

Coal Haulage Ropes
The B. Greening Co............Hamilton Ont.

Coal Storage Plants
Steel Concrete Co. (Ltd.).............Montreal.

Concrete Mixers and Rock Crushers
Goold, Shapley & Muir Co.......Brantford, Ont.
F. H. Hopkins & Co....................Montreal.
Mussens Limited.......................Montreal.
Toronto Pressed Steel Co...............Toronto.

Concrete Pipe
Steel Concrete Co. (Ltd.)..............Montreal.

Contractors' Plant
M. Beatty & Sons................Welland, Ont.
J. T. Gardner ....Chicago, Ill.
F. H. Hopkins & Co....................Montreal.
The W. H. Kelson Co..................Montreal.
Kilgore-Peteler Co............Minneapolis, Minn.
Mussens Limited........................Montreal.
Toronto Pressed Steel Co...............Toronto.

Contractors' Supplies
F. H. Hopkins & Co....................Montreal.
Rice Lewis & Son.......................Toronto.
Toronto Pressed Steel Co...............Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.)...............Montreal.

Cooking Apparatus
Geo. R. Prowse........................Montreal.

Copperware
Geo. R. Prowse........................Montreal.

Copying Presses
James Smart Mfg. Co...........Brockville, Ont.

Cordage
M. McKenzie Co., Limited.............Montreal.

Corrugated Furnaces
Continental Iron Works..........Brooklyn, N.Y.

Cotton Duck
M. McKenzie Co., Limited.............Montreal.

Counter Dusters
Wolfe Brush Co.................Pittsburg, Pa.

Couplers, Car and Locomotive
Latrobe Steel & Coupler Co.....Philadelphia, Pa.
McConway & Torley Co............Pittsburg, Pa.
National Malleable Castings Co...Cleveland, Ohio.
Washburn Steel Castings & Coupler Co.,
..........................Minneapolis, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co..........Toronto.

Cross Arm Braces
Canadian General Electric Co..........Toronto.
Toronto Bolt and Forging Co..........Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co......Toronto.

Crowbars
B. J. Coghlin & Co....................Montreal.
Toronto Bolt and Forging Co..........Toronto.

Culverts
Steel Concrete Co. (Ltd.)..............Montreal.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co , Hamilton.

Cuts
Acton Burrows Limited................Toronto.

Derailing Devices
Hayes Track Appliance Co........Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co..............Montreal.
The B. Greening Co.............Hamilton, Ont.

Derricks
M. Beatty & Sons................Welland, Ont.
Miller Bros. & Toms...................Montreal.
Mussens Limited......................Montreal.

Dies
Butterfield & Co.............Rock Island, Que.

Diving Outfits
John Date..............................Montreal.
Mussens Limited ....Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards..................Syracuse, N.Y.

Door Signs
Acton Burrows Limited................Toronto.

Draft Gear
Farlow Draft Gear Co...........Baltimore, Md.
McCord & Co........................Chicago, Ill.
Standard Coupler Co..............New York City.

Drawing Materials
Eugene Dietzgen Co., Ltd..............Toronto.
James Foster..........................Toronto

Dredges
M. Beatty & Sons...............Welland, Ont.

Drills
W. Abbott............................Montreal

Drills, Twist
Baldwin Steel Co.....................New York.

Dry Goods
The Hudson's Bay Co..........................

Dump Cars (Contractors')
F. H. Hopkins & Co....................Montreal.
Kilgore-Peteler Co............Minneapolis, Minn.
Toronto Pressed Steel Co..............Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.)...............Montreal.

Electric Car Route Signs
Acton Burrows Limited................Toronto.

Electric Cranes
Babcock & Wilcox......................Montreal.
Canada Foundry Co....................Toronto.
Dominion Bridge Co...................Montreal.
Mussen Limited.......................Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co...Mahwah, N J.

Electrical Fuses
Standard Explosives Limited..........Montreal.

Enameled Iron Signs
Acton Burrows Limited................Toronto.

Engineers' Supplies
Canadian Fairbanks Co...............Montreal.

Engines, Automatic
Robb Engineering Co............Amherst, N.S.

Engines, Corliss
Robb Engineering Co............Amherst, N.S.

Engines, Gasoline
Canadian Fairbanks Co...............Montreal.
Goold, Shapley & Muir Co.......Brantford, Ont.
Ontario Wind Engine and Pump Co.....Toronto.

Engines, Hoisting
M. Beatty & Sons................Welland, Ont.

Engines, Stationary and Marine
Polson Iron Works......................Toronto.
Robb Engineering Co............Amherst N.S.

Explosives
Standard Explosives Limited..........Montreal.

Express Office Signs
Acton Burrows Limited................Toronto.

Feedwater Heaters
Canadian Fairbanks Co...............Montreal.
Robb Engineering Co............Amherst, N.S.

Fencing
Banwell-Hoxie Fence Co........Hamilton, Ont.
Canada Foundry Co....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Fire Brick
Mussens Limited ....Montreal.
F. B. Stevens....................Detroit, Mich.

Fire Clay
F. B Stevens......................Detroit, Mich.

Flags
The Hudson's Bay Co..........................

Flour
The Hudson's Bay Co..........................

Forgings
Canada Car Co., Limited..............Montreal.
Crossen Car Mfg. Co............Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.
Standard Steel Works..........Philadelphia, Pa.

Foundry Facings
F. B. Stevens....................Detroit, Mich.

Foundry Supplies
F. B. Stevens....................Detroit, Mich.

Fuse Batteries
Standard Explosives Limited..........Montreal.

Fuse Detonators
Standard Explosives Limited..........Montreal.

Gaskets
McCord & Co........................Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Gates
Banwell-Hoxie Fence Co.........Hamilton, Ont.
Canada Foundry Co....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Gauges, Locomotive Steam
Golden-AndersonValve SpecialtyCo.,Pittsburg,Pa.

Glue Brushes
Wolfe Brush Co.................Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co..............Chicago, Ill.

Groceries
The Hudson's Bay Company...................

Hammers
James Smart Mfg. Co...........Brockville, Ont.

Handcars
Crossen Car Mfg. Co............Cobourg, Ont.
F. H. Hopkins & Co...................Montreal.
Mussens Limited......................Montreal.
Rice Lewis & Son.......................Toronto.
Toronto Pressed Steel Co..............Toronto.

Hardware
The Hudson's Bay Co..........................
Rice Lewis & Son.......................Toronto.

Headlights
The N. L. Piper Railway Supply Co.....Toronto.
Pyle National Electric Head Light Co.Chicago, Ill.

Headlinings
Crossen Car Mfg. Co............Cobourg, Ont.

Hoisting Machinery
Brown Hoisting Machinery Co....Cleveland, Ohio.

Hollow Staybolt Iron and Steel Bars
Falls Hallow Staybolt Co..Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co..........................Chicago, Ill.

Hydrants
Kerr Engine Co..............Walkerville, Ont.

Illustrations
Acton Burrows Limited................Toronto.

Inspections
R W. Hunt & Co......................Montreal.

Instruments, Surveying and Engineering
Eugene Dietzgen Co., Ltd..............Toronto.
James Foster..........................Toronto.

Interlocking Signals
Montreal Steel Works.................Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.

Iron, Bar
Taylor & Arnold......................Montreal.

Iron, Pig
Hamilton Steel & Iron Co., Ltd..Hamilton, Ont.

Iron Signs
Acton Burrows Limited................Toro

Iron Staybolt Bars
Falls Hollow Staybolt Co...Cuyahoga Falls,

Jacks
James Smart Mfg. Co...........Brockville,

Japans
McCaskill, Dougall & Co..............Montreal.

Journal Bearings
Canadian Bronze Co..................Montreal.
Crossen Car Mfg. Co............Cobourg, Ont.
Kerr Engine Co..............Walkerville, Ont.
Jas W. Pyke & Co....................Montreal.
St. Thomas Brass Co..........St. Thomas, Ont.

Journal Boxes
N. J. Holden Co., Ltd................Montreal.
McCord & Co........................Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co.... ....Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry.........................Winnipeg.

Lamps, Incandescent
Canadian Westinghouse Co.......Hamilton. Ont.

Lamps and Lanterns
The Hudson's Bay Company..................
The Hiram L. Piper Co...............Montreal.
The N. L. Piper Railway Supply Co.....Toronto.

Launches
Polson Iron Works....................Toronto.

Lights, Contractors' and Wrecking
F. H. Hopkins & Co...................Montreal.
Mussens Limited......................Montreal.

Locomotive Driver Brake Shoe
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.........Montreal.

Locomotive Lagging and Covering
Canadian Fairbanks Co...............Montreal.
Taylor & Arnold......................Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co........Kingston, Ont.
Locomotive and Machine Co of Montreal.
H. K. Porter Co..................Pittsburg, Pa.

Locomotives (Electric)
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co....................Toronto.
Locomotive and Machine Co. of Montreal

Locomotives (Logging)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co........Kingston, Ont.

Locomotives (Rack)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.........Kingston, Ont.
Locomotive and Machine Co. of Montreal.

Locomotives (Steam)
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co....................Toronto.
Canadian Locomotive Co........Kingston, Ont.
J. T. Gardner ....Chicago, Ill.
The W. H Kelson Co..................Montreal.
Locomotive and Machine Co. of Montreal.
H. K. Porter Co.................Pittsburg, Pa.
Vulcan Iron Works............Wilkesbarre, Pa.

Locomotive Staybolts
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.
Flannery Bolt Co................Pittsburg, Pa.

Lubricators
McCord & Co. .... Chicago, Ill.
Taylor & Arnold .... Montreal.

Machine Tools
W. Abbott .... Montreal.
Canadian Fairbanks Co. .... Montreal.

Machinery, Power
Jno. McDougall, Caledonian Iron Works Co. Montreal

Machinery Special
Miller Bros. & Toms .... Montreal.

Machinery, Transmission
Miller Bros. & Toms .... Montreal.

Manganese Steel Castings
Montreal Steel Works .... Montreal.

Manhole Frames and Covers
American Brake Shoe & F'dry Co. . Mahwah, N.J.
Canadian Iron and Foundry Co. .... Montreal.

Marine Supplies
Rice Lewis & Son .... Toronto.

Milepost Numbers
Acton Burrows Limited .... Toronto.

Milling Cutters
W. Abbott .... Montreal.
Baldwin Steel Co. .... New York.

Motors
McCord & Co. .... Chicago, Ill.

Nickel
The Orford Copper Co. .... New York.

Nickel for Nickel Steel
The Orford Copper Co. .... New York.

Numbers
Acton Burrows Limited .... Toronto.

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sitive Lock Washer Co. .... Newark, N.J.

Square and Hexagon
ada Foundry Co. .... Toronto.
ronto Bolt and Forging Co. .... Toronto.

akum
The Hudson's Bay Company ....
M. McKenzie Co., Limited .... Montreal.

Office Fittings
Canadian Office & School Furniture Co., Preston, Ont.

Office Signs
Acton Burrows Limited .... Toronto.

Oil Furnaces
Railways Materials Co. .... New York.

Oil Tanks
S. F. Bowser & Co., Limited .... Toronto.

Oils
Canadian Oil Co. .... Toronto.
Galena Signal Oil Co. Franklin, Pa., and Toronto.

Packing
The N. L. Piper Railway Supply Co. ... Toronto.

Paint Brushes
Wolfe Brush Co. .... Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co. .... Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co. .... Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co. .... Pittsburg, Pa.

Paints
Canadian Oil Co. .... Toronto.

Pictorial Post Cards
Valentine & Sons Publishing Co. .... Montreal.

Pinch Bars
The N. L. Piper Railway Supply Co. ... Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co. . New York.

Pipe Covering
Canadian Fairbanks Co. .... Montreal.

Pipe Stocks
Butterfield & Co. .... Rock Island, Que.

Platforms, Steel
Standard Coupler Co. .... New York City.

Plating Compositions
F. B. Stevens .... Detroit, Mich.

Ploughs, Contractors'
Mussens Limited .... Montreal.
Toronto Pressed Steel Co. .... Toronto.

Plumbago
F. B. Stevens .... Detroit, Mich.

Pneumatic Tools
N. J. Holden Co., Ltd. .... Montreal.

Polishers' Supplies
F. B. Stevens .... Detroit, Mich.

Polishing Compositions
F. B. Stevens .... Detroit, Mich.

Porter
E. L. Drewry .... Winnipeg.

Portable Boilers
Babcock & Wilcox (Ltd.) .... Montreal.
Robb Engineering Co. .... Amherst, N.S.

Power Houses
Steel Concrete Co. (Ltd.) .... Montreal.

Printing
The Hunter Rose Co. .... Toronto.
The Mail Job Printing Company .... Toronto.

Pumps
S. F. Bowser & Co., Limited .... Toronto.
Canadian Fairbanks Co. .... Montreal.
Canada Foundry Co. .... Toronto.
Goold, Shapley & Muir Co. .... Brantford, Ont.
Ontario Wind Engine and Pump Co. ... Toronto.
James Smart Mfg. Co. .... Brockville, Ont.

Pumps (Centrifugal)
M Beatty & Sons .... Welland, Ont.

Rail Benders, Roller
F. H. Hopkins & Co. .... Montreal.
Montreal Steel Works .... Montreal.

Rails (new)
Dominion Iron & Steel Co. .... Sydney, N.S.
Drummond, McCall & Co. .... Montreal.
J. T. Gardner .... Chicago, Ill.
J. J. Gartshore .... Toronto.
F. H. Hopkins & Co. .... Montreal.
Kilgore-Peteler Co. .... Minneapolis, Minn.

Rails (for relaying)
F. H. Hopkins & Co. .... Montreal.
J. J. Gartshore .... Toronto.
Mussens Limited .... Montreal.
Jas. W. Pyke & Co. .... Montreal.

Rail Joints
The Rail Joint Co. of Canada .... Montreal.

Railway Pile Drivers
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.

Railway Supplies
Canadian Fairbanks Co. .... Montreal.
The W. H. Kelson Co. .... Montreal
The Hiram L. Piper Co. .... Montreal.
The N. L. Piper Railway Supply Co. ... Toronto.
Rice Lewis & Son .... Toronto.

Reamers
W. Abbott .... Montreal.
Baldwin Steel Co. .... New York.
Butterfield & Co. .... Rock Island, Que.

Refrigerators
Geo R. Prowse .... Montreal.

Rivets, Boiler, Bridge and Structural
Toronto Bolt and Forging Co. .... Toronto.

Rolled Wheels
Standard Steel Works .... Philadelphia, Pa.

Roof Trusses
Canadian Bridge Co. .... Walkeville, Ont.
Dominion Bridge Co. .... Montreal.

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F. H. Hopkins & Co. .... Montreal.
The Hudson's Bay Co. ....

Rotary Snow Ploughs
Crossen Car Mfg. Co. .... Cobourg, Ont.

Roundhouses
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O. M. Edwards .... Syracuse, N.Y.

Sash Locks
O. M Edwards .... Syracuse, N.Y.

Saw Steel
Montreal Steel Works .... Montreal.

Scoria Blocks
W. H. Knowlton .... Toronto.

Scrapers (Wheel and Drag)
Bechtels Limited .... Waterloo, Ont.
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.
Toronto Pressed Steel Co. .... Toronto.

Screw Plates
Butterfield & Co. .... Rock Island, Que.

Screws, Coach and Lag
Toronto Bolt and Forging Co. .... Toronto.

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Acton Burrows Limited .... Toronto.

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Falls Hollow Staybolt Co. . Cuyahoga Falls, Ohio.

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See Purchasing Agents' Guide
on page 225

See Alphabetical Index to
Advertisements on page 191.

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New Series, No. 121.

TORONTO, CANADA, MARCH, 1908.

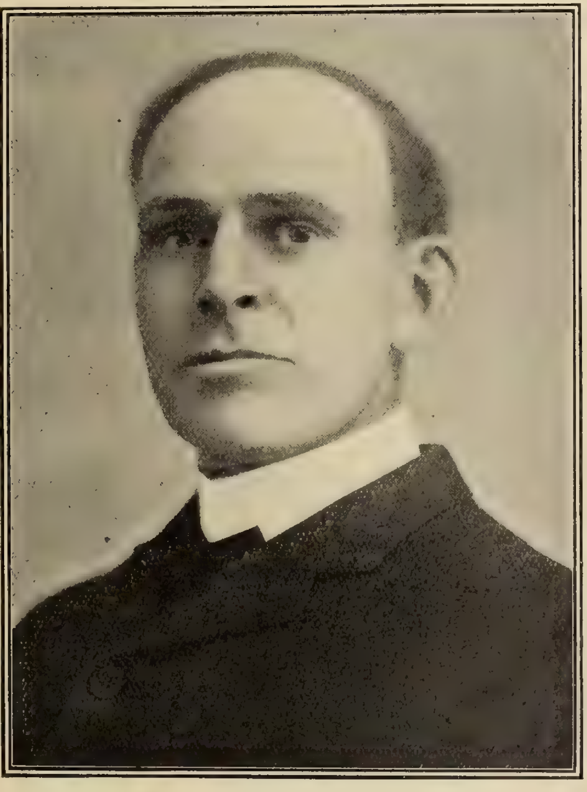
For Subscription Rates,
See page 191.

THE RAILWAY COMMISSION.

Its Constitution, Jurisdiction and Work.

By James Mills, LL.D., one of the Commissioners.

I fear that my observations on this subject may prove to be extremely dry and uninteresting to many, because the Railway Act is a very prosy document, and the Railway Commission is composed of three matter-of-fact, hardworking men, assisted by a hardworking staff. Nevertheless, there is, I think, in the Railway Act, something of interest to thoughtful, progressive Canadians; for it deals directly with an important phase of the great problem of transportation—that part of it which we may speak of as the carriage of goods or commodities from place to place by land; and that is no ordinary problem; it is a problem of prime importance—might I not say the problem of the country? For however abundant and useful the products of our soil and the live stock on our farms, however great the quantity and excellent the quality of the timber in our forests, however varied and rich the ores in our mines, however ingenious in design and high-class in workmanship the output of our factories, they are all to a large extent valueless, unless we have a fairly efficient and not unreasonably expensive means of carrying them from the localities where they are produced to localities where they are wanted—to places where there are markets for them. Consequently, I feel warranted in saying that the problem of transportation is not an ordinary problem, but one of the utmost importance; and it is a problem of great difficulty, involving many troublesome and perplexing considerations which complainants are apt to overlook. Most people see only their own side of the cases submitted for adjudication; but the Railway Commission has to get and consider carefully the evidence on both sides; and it generally takes time to obtain the necessary information by correspondence with the railway companies or otherwise, weigh it judicially, and issue in proper form such orders as the facts and circumstances seem to warrant. Hence it frequently happens that the decisions of the Commission are not given so promptly as many think they should be.



O. O. WINTER,
General Superintendent Grand Trunk Pacific Railway.

As a Commission, we are under obligation to do everything that can fairly and reasonably be done to secure for the people of this country prompt, good, and reasonably cheap transportation—to keep the golden stream of commerce flowing swiftly and benignly past their doors; but, in our efforts to meet the wishes of the people in this respect, we must be careful not to issue orders which will result in serious injury to our transportation companies; for anything that would destroy the credit of any of our leading railway companies or otherwise seriously cripple them, would be a calamity—would do incalculable damage to the whole country. Hence, metaphorically, if not very elegantly, I may say that, in our zeal, we must not kill the goose that lays the golden eggs.

The distinctive title of the Commission is "The Board of Railway Commissioners for Canada"; and throughout the Railway Act it is usually referred to as "the Board." The general scope of the Act may be very briefly stated under six heads: 1. The constitution, procedure, jurisdiction, and general powers of the Board; 2. The incorporation of railway companies; 3. The construction of railways; 4. The operation of railways; 5. The traffic on railways, including passenger fares and freight rates; 6. Penalties for specific sins of omission and commission—some 46 in number, varying in amount from $2 to $5,000 each.

The Commission is a court of record, with very wide jurisdiction in matters pertaining to railways and railway companies; it has all the powers, rights, and privileges which are vested in a superior court, and powers much greater than the powers of any other court in the Dominion. The findings of the Board on questions of fact within its jurisdiction are binding and conclusive; every decision or order of the Board is final; the Board is not bound by the findings or judgments of other courts; and no order, decision, or proceeding of the Board can be questioned or reviewed, restrained or removed by prohibition, injunction, certiorari, or any other process or proceeding in any court. There is a right of appeal from the Board to the Supreme Court of Canada on questions of jurisdiction, and the Board may allow appeals to the same court on questions of law; but the only body which of itself can rescind or vary any order, decision, rule, or regulation of the Board is the Governor-in-Council. The Board may review, change, alter, vary, or rescind its own orders and decisions as often as it thinks proper; and it can do of its own motion anything it can do upon complaint or application. Doubtless, the reason for giving such extensive powers to the Commission was the hope that through it, by direct, simple and informal proceedings, shippers and others having dealings with railway companies, express companies, and telephone companies, might have their disputes settled and get substantial justice without expensive litigation and the possibility of appeals carried from court to court; and the greatness of the power bestowed, imposes upon the Commission the obligation to exercise due care, deliberation, and caution in everything it does or refuses to do. It is scarcely necessary to say that the work of the Commission is very heavy.

The great Interstate Commerce Commission of the United States has been in existence for about 20 years. It was at first composed of five commissioners, who were paid $7,500 a year each; but recently two additional commissioners were appointed, and the salary was increased to $10,000 a year each. The Commission elects its own chairman, aiming to get a man who is a good organizer, possessed of first-class executive ability. Mr. Knapp, the present chairman, has been on the Commission for about 16 years, and has been Chairman for 10 years. He was Chairman when there were five commissioners, and has been Chairman since the number of commissioners was increased to seven. He has taken part in the work of both commissions; and regarding the number of commissioners, he is of opinion that seven is the maximum number for efficient administration,—he doubts whether seven would be better than five,—he feels sure that five would be better than nine or more, and he thinks that when there is need (as there may occasionally be), the Commission should select and send out special men, specialists, experts, if you will, to do special work,

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CHARLES MILLER,

PRESIDENT.

rather than have an unduly large number of men on the Commission.

One of the members of the English Railway and Canal Commission is, I understand, a practical railway man; but they have no railway experts on the U.S. Interstate Commerce Commission, and when asked about the advisability of having such men on the Commission, Chairman Knapp said "No," the work of the Commission being quasi-judicial and strictly administrative,—he had not as yet favored the appointment of experts of any kind; and he asked me whether the crystallized opinion of the country regarding the judiciary was that we should have expert politicians on the bench to try election cases, expert bankers to try banking cases, expert railway men to try railway cases, or expert business men to try cases growing out of business transactions. This is a very brief statement of the views of a keen and able man of wide experience, and as there has been some talk in this country about the need of railway experts on our Commission, it is proper that we should consider the question and see whether there really is such a need. May I ask what you mean by a railway expert—do you mean an expert in railway construction, an expert in the operation of railways, or an expert in traffic and rate-making? The experience and qualifications of these experts are very different, and suppose you could get, even for $10,000 a year, an available man who has had a broad and thorough training in each of the three great departments of railway work, what about his work on the Commission? Would it be to solve all railway problems and settle all railway questions for the Commission? No commissioner would be allowed to do so on a commission of competent men. He could simply furnish information, give the results of his experience, and express his opinion on the points at issue, that is, do just what is done for our Commission every week, equally well, and at much less expense, by railway experts employed for the purpose—engineers, operating men, and traffic experts—men who devote their whole time and their undivided attention to the special work of their respective departments, and are not distracted, as commissioners are, by all kinds of problems; men, also, whom you can send anywhere, at any time, to make personal examination of railway terminals and railway equipment, or investigation of railway management and the books of railway companies—men, in a word, who can do for the Commission many necessary and important things which a commissioner cannot consistently do. My own opinion—concurred in by Mr. Knapp—is that a man should not be excluded from a railway commission because he happens to be an expert, whether he is a farmer, a fruit grower, a business man, a journalist, a professor, a politician, a lawyer, or a railway man, provided that, above everything else, he is clearly and manifestly a man without bias, resulting either from temperament or from training, a broad-minded man, of ability, education, clear-cut individuality, persistent industry, and undoubted capacity for work, a judicial mind, sound common sense, unfailing courage, and incorruptible integrity—a man who cannot be, directly or indirectly, influenced by personal favors, society connections, or club associations, and can always be counted on to stand firmly and strongly for justice or fair play, without regard to popular favor or personal advantage.

Each member of the Interstate Commerce Commission has constantly at his disposal a first-class stenographer at $1,200 a year, a private secretary at $2,000 a year, and a law clerk at $2,500 a year. The Commission has a staff of something over 300; it spent about $850,000 last year; and it has applied for an appropriation of $1,000,000 for the year on which it has just entered. The Commission has divided the country into as many districts as there are commissioners; and all ordinary railway correspondence and informal complaints from any district go at once to the commissioner who represents that district, to be disposed of by him with or without consultation with the Chairman or other commissioners. All formal complaints filed for hearing are sent to the Secretary, who has them summarized on paper of uniform size, folded and numbered; and on Monday morning of each week, just before the weekly meeting of the Commission, these formal applications are shuffled like a pack of cards by a committee of three; and the first drawn is allotted to Commissioner A, the second to Commissioner B, the third to Commissioner C, and so on to the end of the list; then back to A, and round in a circle till all are distributed. Next week, the committee will commence its distribution at the point where it left off this week; and when an application is allotted to a commissioner, he is responsible for it till it is finally disposed of. In this way there is a fair and complete division of labor; each commissioner is fully occupied all the time; and in case there is undue delay in disposing of an application, it is known who is responsible. Over 50% of the cases formally adjudicated by the Interstate Commerce Commission are, I understand, heard by one commissioner, a considerable number by two, and a much smaller number by three. When a commissioner hears a case, he reports upon it as soon as possible, giving his findings, his conclusions, with his reasons therefor, and an expression of his opinion as to the action which should be taken. This opinion or judgment is at once printed; a copy of it in galley form is sent to each commissioner, and as soon as possible thereafter it is brought to the attention of the Commission at a weekly meeting, when it is carefully considered and freely discussed as to the findings, the law, the conclusions, the form, the composition, and the punctuation; and all such judgments, when finally approved, are promptly printed and distributed in pamphlet form—each case in a separate pamphlet. When two or three commissioners hear a case in the absence of the Chairman, the chair is taken and the case reported upon by the commissioner who is senior in time of appointment. The Interstate Commerce Commission has very little to do with the physical side of railways, that is, with the matter of railway construction and railway operation; it has large powers of investigation; it collects and tabulates statistics regarding railways, railway accidents, etc.; and it is dealing with the method of keeping railway accounts; but it devotes the greater part of its time and attention to the question of rates, discrimination, rebates, overcharges, refunds, etc.; and all its decisions and orders are subject to appeal to the state courts and to the U.S. Supreme Court.

The work of the Canadian Commission is much broader, much heavier, and equally difficult, including railway construction and the operation of railways, as well as the question of railway rates, rate-making, discrimination, etc., not to speak of telephone and express company rates and management. The things requiring constant attention under the heads of railway construction and railway operation are very numerous. We have the location and inspection of new lines of railway; the taking and using of lands of other companies and of private individuals; the construction of branch lines, spurs, or sidings; the crossing of one railway by another; highway crossings; farm crossings; the carrying of telegraph, telephone, electric light, and electric power wires over the right-of-way and tracks of railway companies; the construction of sewers and the laying of waterpipes under railways; the fences, gates and cattle-guards required in railway construction; the location, character, and suitability of railway stations; especially the widespread and urgent demand for additional crossings over railways in the towns and villages of the west; the everlasting question as to the protection required at highway and street crossings in cities, towns, villages, and rural municipalities throughout the Dominion, and the division of the cost involved in such protection as may be ordered—all this and much more under the head of construction.

Think of all the railways in the Dominion and the hundreds upon hundreds of railway stations in the different provinces, and take into account two or three facts to show the amount of work which our Commission has, over and above what is assigned to the U.S. Interstate Commerce Commission: 1st. No railway company in any part of Canada can construct a branch, spur or siding which will cross or run along any street or highway or touch any property other than that of the railway company, without an order from the Commission. 2nd. No company or individual in any part of Canada can carry a telegraph wire, a telephone wire, an electric light wire, or an electric power wire over the right-of-way and track of a railway company, without an order from the Railway Commission. 3rd. No city, town, village, or rural municipality in any part of Canada can construct a sewer or lay a water pipe of any size or description under a railway, without an order from the Railway Commission. Remember, I have no complaint about this work, because the intention in every case is to protect the travelling public and see that the rights of all parties, of private citizens and railway companies alike, are duly considered and protected. In passing, I may refer to the fact that the Board some time since ordered a change in the method of lighting C.P.R. passenger trains, and directed all Canadian railway companies to equip their passenger trains with fire extinguishers, by putting one in an easily accessible place, at each end of every passenger, express, and baggage car, with a view to prevent as far as possible the destruction of life and property by fires such as frequently occur in connection with railway collisions, run-offs, etc.

Further, I desire to offer a few words of comment under this head. First, I would call your attention to the fact that we have, as intimated above, a constant demand for crossings through long railway yards which divide many of the towns and villages in the Western provinces. The inconvenience and loss of time resulting from the lack of such crossings are so great that the people are very determined and persistent in their appeals for relief; and we are at a loss what to do, because crossings through railway yards are usually dangerous and always interfere more or less with the operation of trains; and the cost of building bridges or constructing subways, unless it is equitably divided among those who are interested and reasonably able to pay, is out of the question. Second, I need not remind you of the loud and frequent complaints from all parts of the older provinces about the lack of proper protection at street and highway crossings. These complaints are constant; and, again, we are at a loss, in very many cases, because of the greatness of the cost involved. These problems demand solution; and it is manifest that the cost of installing and operating gates, building bridges, and constructing subways, in order to secure reasonably necessary crossings through long railway yards, and provide the protection required at street and highway crossings, throughout the Dominion, would be a very oppressive burden upon the strongest of our railway companies and would almost bankrupt the weaker ones; therefore, I think the time has come when Parliament should deal with these questions by special legislation, as has been done in the State of New York and in some other

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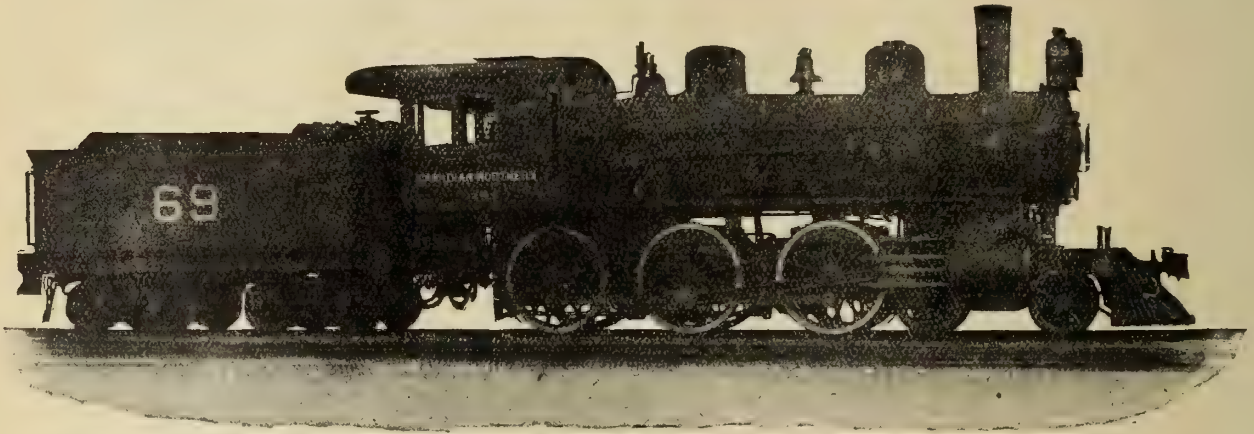

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Westminster, S.W.

states across the line,—fixing the terms as to where, when, and under what conditions crossings shall be made or protection ordered, and providing for a fair and reasonable distribution of the cost. Wherever these questions have been dealt with in the United States, the cost has been imposed, in different proportions, upon the railway company, the municipality or municipalities, and the state.

Under the head of the operation of railways we have the question of the accommodation necessary for receiving, carrying, and delivering traffic; the rules for the running of trains; the handling of trains in transit; the handling of trains in yards; interswitching between railway companies; the protection of property; the protection, safety, accommodation, and comfort of the public and of the employes of the companies; the safety appliances required on engines and cars; the condition of rolling stock; car shortage and car distribution; complaints about unreasonable delays in transportation; precautions at railway crossings; obstruction of highway traffic; passenger train connections; transportation of dangerous commodities; the packing of frogs and care of switches in railway yards; and the investigation of accidents to the public and to railway employes. The Board has given a great deal of time and attention to the investigation of accidents on our lines of railway and in railway yards throughout the Dominion; and all the while the number of such accidents has been rapidly increasing,—from various causes, especially I think the following: the congestion of railway traffic for some time past; an increase in the breakage of steel rails, possibly from defects in structure and may be from the use of much heavier engines and cars; the lack of discipline and due sense of responsibility among railway men; and the employment of inferior and inexperienced men and boys in responsible positions. The Board has been looking sharply after the railway companies regarding the arrangement and condition of their yards, the location and condition of switches, the use of necessary yard lights, the condition of their rolling stock, and the use of safety appliances on their cars and engines; it has also done what it fairly and reasonably can in directing the attention of attorneys-general to cases which seem to call for careful consideration and possible action, with a view to the protection of the travelling public and the employes of the railway companies; and action has been taken in a considerable number of cases, but with very meagre results, because, under present conditions, the public mind, as represented by the average jury, seems strongly opposed to the punishment of men for negligence or recklessness in the management of railway yards, the handling of cars, or the running of trains, even when the results are fatal, the offences wholly inexcusable, and the evidence most clear and convincing.

Under the head of traffic, the question is whether, with the telephone and express companies to look after and the great amount of work to be done under the heads of railway construction and operation, the Commission can give due attention to the larger and much more difficult questions which arise in the traffic department—questions as to passenger fares and freight rates, freight classification, discrimination, rebates, overcharges, refunds, etc.; and my answer is that we have been able to give a good deal of attention to the settlement of questions and the solution of problems regarding railway rates throughout the Dominion—work which has removed many grievances and saved the country very many thousands of dollars. If I had time I would be glad to state the results accruing from a large number of orders issued for the reduction, adjustment, and regulation of passenger fares and freight rates; but I can merely refer to a few of the most important orders, without going into details. There are on our files 50 or 60 orders regarding freight rates, not to speak of passenger fares; but I have not time to do more than quote a few figures.

Note a few concrete examples of reductions in rates consequent upon orders of the Commission, taking a standard car of 30,000 lbs. in each case: Fruit—reductions from a single station, St. Catharines, Ont., to Montreal, on pears, $45 a car; on staple tender fruits, $21 a car; on apples, pears, etc., to Winnipeg, $54 a car; to Brandon, $72 a car; and on pears and standard tender fruits to other points, east and west, in like proportion. Glass bottles, Wallaceburg to Toronto, $15 a car, and to Hamilton, $18 a car. Cooperage stock, Chatham and Wallaceburg to Montreal (local and export), $4 a car. Split peas, Toronto to St. John, N.B. (export), $9 a car. Cattle, Windsor and Sarnia to Montreal, $4.50 a car. Metallic shingles, Toronto to Winnipeg, $30 a car, and to Strathcona, Alberta, $123 a car. Grain, shipments between local points (reduced to same rate as flour), say, Thamesville, Ont., to Montreal, $24 a car. Grain for export, from Windsor to Montreal, $6 a car; from Owen Sound, $7.50 a car; from Guelph, $9 a car; and from Toronto, $6 a car. Beans, Chatham to St. John, $16.50 a car. Packing-house products, Toronto to Montreal (export), $3 a car. Wall paper, Toronto to Montreal, $15 a car. All transcontinental traffic, Eastern Canada to British Columbia terminals, $15 a car; also a re-adjustment of rates from distributing centres west of Montreal, so as to place them on a fair basis; and a general overhauling of the rates on traffic from Ontario points eastbound, reducing and re-adjusting them so as to abolish the discrimination which has hitherto existed in favor of Detroit, Port Huron, and other points in Michigan as compared with Windsor, Sarnia, Chatham, and other points in Western Ontario. The order providing for these far-reaching and very important re-adjustments has made extensive reductions in all rates from points in Western Ontario to Montreal, Ottawa, and other points east as far as St. John, Halifax, and Sydney; for example, Windsor to Montreal, $26 a car; St. Catharines to Montreal, $30 a car; St. Thomas to Quebec, $54 a car, and so on.

I might go much further in this line, but I wish to refer, in a word, to another side of the question before I close. Speaking of the shipping of fruit, I am glad to be able to inform you that the considerable reduction in rates, has resulted in a very large increase in the carload traffic in fruit. Take St. Catharines, the point referred to in speaking of the reduction in rates on fruit. When the reduction was made, three and a half years ago, a little over 10 cars of fruit were shipped from St. Catharines to Winnipeg and other points west; and during the season just closed, a rather poor one for fruit, something over 100 cars of mixed lots of fruits—that is, ten times as much—was shipped from the same station to the same destination. I sincerely hope that in the case of every order for reduction of rates, especially in the case of the last and farthest-reaching of all our rate orders, the result may be the same.

The following statistics respecting the Commission's work may prove of interest: In 1907, there were as follows: applications, 2,600; letters filed, 18,984; letters sent, 18,311; orders issued, 1,816; public sittings, 66; applications heard, 321; freight tariffs on file, 67,371; passenger tariffs, 9,035; express tariffs, 7,013; telephone tariffs, 3,518, —or total rate tariffs, 86,937.

The foregoing was given by Mr. Mills as an address at a luncheon of the Ottawa Canadian Club recently.

Rolling Stock Orders Not Cancelled.

From the Toronto Globe, Jan. 25, 1908:

"On all hands it is announced that railways have cancelled their orders for rolling stock. For the past few years, when it was pointed out to the transportation companies that their rolling stock was inadequate to the demands of their patrons, the reply invariably was that the manufacturers of rolling stock had orders for a year ahead, and that the railways were buying all the rolling stock that it was possible to get hold of. Now, what should be the present policy of the railways? Should the rolling stock factories be working on short time? As soon as this little sag in business is over, the demands on the railways will revive in greater magnitude than ever, and every road will be short of rolling stock. Prevision of a businesslike kind would suggest that the output of cars should not stop, but go right on."

From the Toronto Globe, Feb 6, 1908:

To the Editor of the Globe: In an editorial paragraph in a recent issue you said: "On all hands it is announced that railways have cancelled their orders for rolling stock,", and, after commenting on this, you added: "Prevision of a businesslike kind would suggest that the output of cars should not stop, but go right on." When I read the paragraph I felt convinced that you had been misinformed, as it is part of my business to keep track of orders placed by the various Canadian railways for rolling stock, of which I receive official intimation, and I had not received any advice of any orders having been cancelled. But so as to admit of no possible doubt, I at once communicated with the managements of the four principal Canadian railways, viz., the Canadian Pacific, the Grand Trunk, the Canadian Northern, and the Intercolonial, and also with the various Canadian locomotive and car builders.

Officials of the four railways above mentioned assure me that none of their orders have been cancelled, and all the builders of rolling stock state that they have not received any cancellations of orders. The manufacturers giving me this information include all the principal rolling stock makers in Canada, viz., the Canada Foundry Co., Toronto; the Canadian Locomotive Co., Kingston, Ont.; the Locomotive and Machine Co. of Montreal; the Canada Car Co., Montreal; the Crossen Car Manufacturing Co., Cobourg, Ont.; the Dominion Car and Foundry Co., Montreal; the Hart-Otis Car Co., Ltd., Montreal; and Rhodes, Curry & Co., Amherst, N.S. Their replies show that not only the larger roads, but also the others, have not cancelled any orders.

As a matter of fact large rolling stock orders have been placed recently. Notably, the Grand Trunk has ordered 100 locomotives, the Canadian Pacific has placed one order for 400 steel cars, besides a number of smaller orders, and the Intercolonial has ordered over 400 cars.

Among the letters I have received a car-building firm writes: "In place of there being any cancellations, we have recently sold 500 cars." And a Superintendent of Motive Power writes: "We are placing orders instead of cancelling them, and have this month ordered 410 cars."

I am sure you would be pleased to give publicity to these facts.

ACTON BURROWS,
Managing Director THE RAILWAY AND MARINE WORLD.

From the Toronto Globe, Feb. 7, 1908:

"While regretting the necessity for retrenchment and economy by so many American railways, and appreciating that the Dominion must feel every material change

IMMEDIATE SHIPMENT

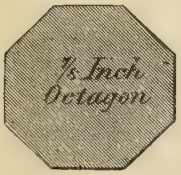
FROM STOCK

SAFETY BLASTING FUSE

BLAST HOLE LOADERS

DRILL STEEL

BLASTING BATTERIES



Write For Prices

MUSSENS LIMITED

MONTREAL TORONTO WINNIPEG VANCOUVER

in commercial conditions across the line, it is gratifying to record continuous activity on the part of leading Canadian railways. Instead of falling in with the prevailing habit of cutting down outlays, the Canadian systems have wisely taken advantage of the passing depression to increase and improve their equipment. This line of policy is at once a gratifying assurance of the sound financial condition of our railways, and a corrective influence tending to prevent commercial depression. It is also a profitable line of policy for the railways. In carrying on equipment work at the present time they escape the restlessness of workmen and the demands of high wages almost inevitable in periods of activity. Both labor and material are abundant, and every facility is afforded for the prompt filling of orders. Mr. Acton Burrows, of The Railway and Marine World, has written to The Globe some facts regarding current activity in perfecting railway equipment in Canada, citing the Grand Trunk's order for 100 locomotives, the Canadian Pacific's order for 400 steel cars, and the Intercolonial's order for 400 cars. There has been no cancellation of orders for equipment by Canadian railways. One car-building firm has recently received an order for 500 cars, and a Superintendent of Motive Power is quoted as having placed orders during the present month for 410 cars.

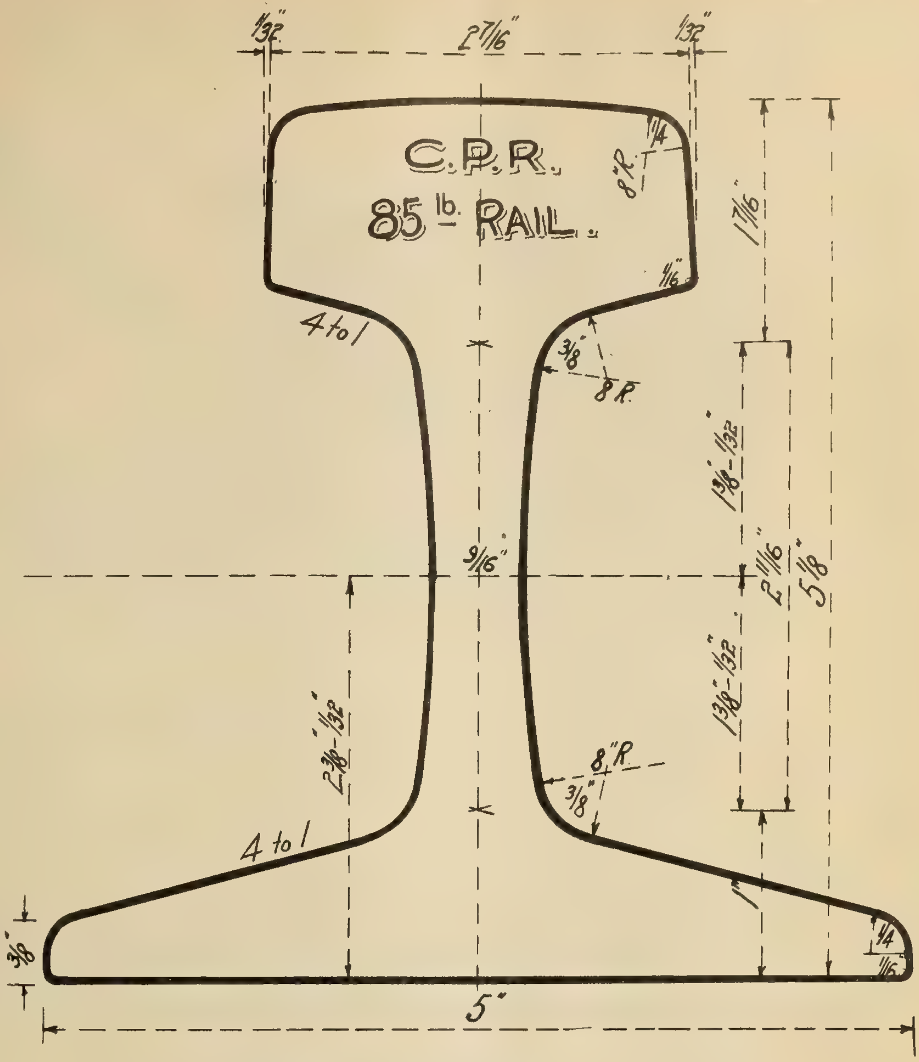
"The record of activity on the part of Canadian railways has been supplemented by the testimony of all the leading locomotive and car works in Ontario and Quebec. They are without exception profiting by the policy of the Canadian railways in choosing a period of comparative depression for improving their equipment. This will not only be directly profitable to the carrying corporations taking advantage of the abundance of labor and material, but will put them in a good position to improve their opportuntites as soon as railway business revives.

"The railways and other great employing corporations pursuing a course calculated to relieve a period of depression should be accorded all possible assistance by the financial institutions of the Dominion. It is known that many firms perfectly solvent have been forced to restrict operations owing to the refusal of banking accommodation. This, though extremely unfortunate, had to be regarded with leniency during the time when an accidental and unfounded rumor might have precipitated a disastrous run on the soundest of our financial institutions. But now that the storm has passed without serious damage, the banks are in a position to more freely consider their obligations to the business community. When the leading railways are continuing the energetic improvement of their equipment, thus counteracting a tendency toward business depression, they should be accorded every possible assistance by the banking corporations. The sooner our leaders of industry and finance perceive that the danger is past the sooner will we feel a full revival of the activity of a few months ago. The railways are taking the lead, and other lines of enterprise should give them support."

◆

At the annual meeting of the Canadian Transfer Co., Ltd., held in Montreal recently, H. Paton, C. Cassils, G. R. Starke, Sir H. Montagu Allan and W. C. McIntyre, were re-elected directors. F. M. McRobie is Manager and Secretary.

An arrangement has been made between the Wabash Rd. and the Pere Marquette Rd., by which the rolling stock of the first mentioned line used in Canada will be repaired at the P.M.R. shops at St. Thomas, Ont., instead of being sent to Fort Wayne, Ind., as heretofore.



The Canadian Pacific Railway's New Rail Section.

The C.P.R. has adopted a new section of 85-lb. rail, as shown in the accompanying illustration. It varies from the American Society of Civil Engineers' section by having a heavier base and having the upper and lower portions of the web reinforced. It is believed that this section of rail will admit of cooler rolling, on account of the more uniform distribution of the metal throughout the rail, which will give a stronger and better wearing rail than the previous standard section. We are indebted to F. P. Gutelius, Assistant Chief Engineer, for the drawing from which our illustration is made and also for the following additional particulars:

VERTICAL INERTIA 29·492. HORIZONTAL INERTIA 7.139.

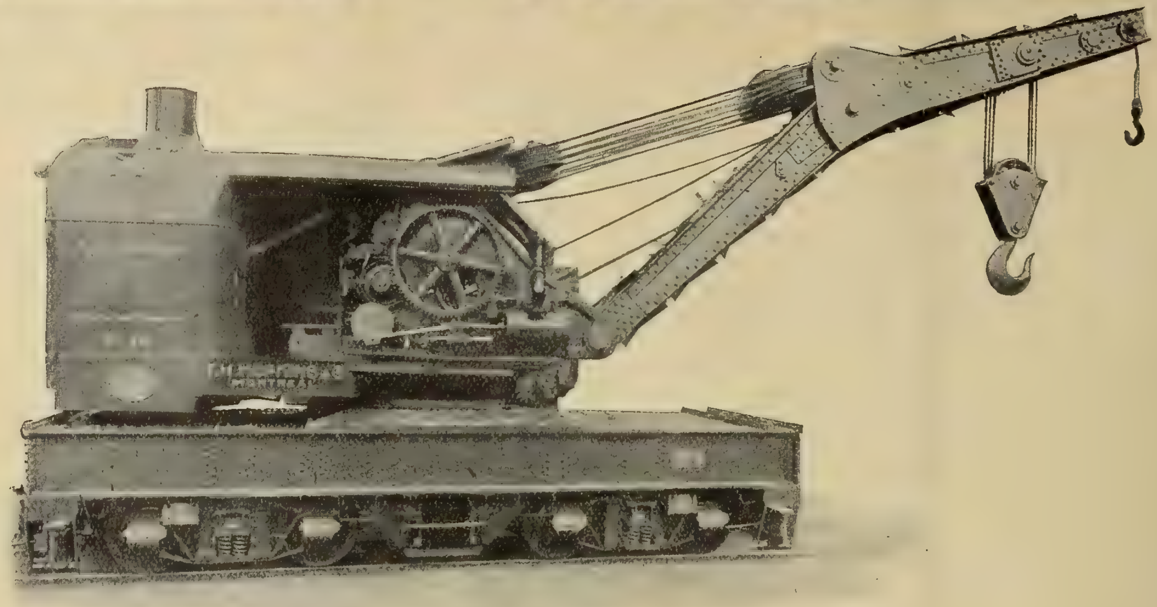
	AREA PERCENTAGES	COOLING PERC'TGES	VERTICAL SECTION MODULUS	HORIZ'TAL SECTION MODULUS
HEAD	36.77	1.965	10.425	
WEB	22.21	3.081		
BASE	41.02	2.875	12.84	2.855
TOTAL	100.00	2.586		

Kettle Valley Railway Lines.

Hon. R. W. Scott, replying to a question put by Hon. J. A. Loughead in the Senate, Feb. 11, said no reason whatever had been assigned by the Kettle River Valley Ry. Co. for failing to send in statistical returns for the year ended June 30, 1907. Demands had recently been made upon the company's officers for the fulfilment of the statutory requirements in this regard, and if these requests were not complied with the case would be submitted to the Department of Justice. A contract was entered into with the company on June 6, 1907, for the extension of its railway from Grand Forks to 50 miles up the North Fork and West Fork of the Kettle River, voted in 1906 in lieu of the subsidy voted in 1903. There had been paid as follows: 40% of subsidy due on 43.40 miles of railway, from Grand Forks towards North Fork of Kettle River, ordinary subsidy $3,200 a mile for 43.40 miles—equals $138,880; additional subsidy of 60% of $3,200 per mile, equals $1,900 per mile for 43.40 miles, or $83,328; ordinary subsidy, $138,880; plus additional subsidy, equals $222,208; 40% of $222,208 equals $97,771.52.

◆

Railway Taxation in British Columbia.—The British Columbia Legislature has under consideration a bill having for its object the amending of the Railway Assessment Act of 1907, by the addition of a new section to be numbered 6a. The new section authorizes the Lieut.-Governor-in-Council to grant to any railway company an exemption from the assessment and tax imposed by sec. 6, for a period not exceeding 10 years from the date of completion of any railway which may be completed after Jan. 1, 1908; the date of such completion shall mean the date of the certificate of the Land and Works Department that the railway is open for traffic and passengers.



"Industrial" Wrecking Cranes

Particulars upon request From 25 to 100 Tons Capacity Prompt Shipments

F·H·Hopkins & Co
CANADIAN REPRESENTATIVES
Successors late Jas. Cooper
Montreal

HART AND OTIS TYPE DUMP CARS

THE HART-OTIS CAR CO., LIMITED, MONTREAL
Successors to Dominion DUMP CAR Company, Limited

March Birthdays.

Many happy returns of the day to

W. G. Annable, General Baggage Agent C.P.R., Montreal, born at Ottawa, Mar. 3, 1875.

P. S. Archibald, C.E., General Manager Elgin and Havelock Ry., Moncton, N.B., born at Truro, N.S., Mar. 21, 1848.

C. N. Armstrong, ex-General Manager Atlantic and Lake Superior Ry., Montreal, born at Maskinonge, Que., Mar. 19, 1850.

A. H. Baird, C.P.R. Ticket Agent, Paris, Ont., born at Montreal, March 1, 1834.

R. W. Bishop, resident engineer C.P.R., Ottawa, born at Owen Sound, Ont., Mar. 18, 1884.

D. E. Brown, ex-General Superintendent C.P.R. Trans-Pacific Steamship Service, Vancouver, B.C., born at Owen Sound, Ont., Mar. 20, 1855.

G. J. Bury, General Manager C.P.R. Western Lines, Winnipeg, born at Montreal, Mar. 6, 1866.

Allan Cameron, General Traffic Agent, C.P.R., for Great Britain and Europe, London, Eng., born near Owen Sound, Ont., Mar. 14, 1864.

F. G. J. Comeau, General Freight Agent Dominion Atlantic Ry., Halifax, N.S., born at Meteghan River, N.S., Mar. 10, 1859.

A. E. Cox, Storekeeper Canadian Northern Ry., Winnipeg, born at Huddersfield, Eng., Mar. 12, 1863.

Hon. L. J. Forget, President Montreal Street Ry. Co., born at Terrebonne, Que., Mar. 11, 1853.

C. O. Foss, on survey National Transcontinental Ry. in New Brunswick, born at Wentworth, N.H., Mar. 20, 1852.

H. W. Gays, General Manager Ottawa and New York Ry., Ottawa, Ont., born at Brant, Erie co., N.Y., Mar. 21, 1848.

F. Grundy, Vice-President Quebec Central Ry., Sherbrooke, Que., and President Temiscouata Ry., born at Bury, Lanc., Eng., Mar. 28, 1836.

J. Halstead, Assistant General Freight Agent, C.P.R., Calgary, Alta., born at Bracebridge, Ont., Mar. 2, 1877.

R. M. Hannaford, Engineer Permanent Way, Buildings and Bridges, Montreal Street Ry., Montreal, born there, Mar. 22, 1865.

W. Harty, M.P., President Canadian Locomotive Co., Kingston, Ont., born in Biddulph tp., Middlesex, Ont., Mar. 8, 1847.

C. A. Hayes, Assistant General Freight Agent G.T.R., Chicago, Ill., born at West Springfield, Mass., Mar. 10, 1865.

C. B. Hibbard, General Manager Quebec, Montreal and Southern Ry., and Napierville Junction Ry., Montreal, born at St. John's, Que., Mar. 31, 1858.

J. Hobson, Consulting Engineer G.T.R., Hamilton, Ont., born at Guelph, Ont., Mar., 1834.

F. Lee, Division Engineer C.P.R., Winnipeg, born at Chicago, Ill., Mar. 7, 1873.

R. W. Long, Division Freight Agent G.T.R., Hamilton, Ont., born at Appin, Ont., Mar. 20, 1873.

C. E. Lytle, General Superintendent Duluth, South Shore and Atlantic Ry., Marquette, Mich., born at Newark, Ohio, Mar. 2, 1859.

D. D. Mann, Vice-President Mackenzie, Mann & Co., Ltd., and 1st Vice-President Canadian Northern Ry. Co., Toronto, born at Acton, Ont., Mar. 23, 1853.

J. M. McKay, Trainmaster C.P.R., Portage la Prairie, Man., born at Tiverton, Ont., Mar. 13, 1868.

Owen McKay, ex-Chief Engineer, Lake Erie and Detroit River Ry., Walkerville, Ont., born in Ross tp., Renfrew co., Ont., Mar. 13, 1848.

D. J. Murphy, Jr., Assistant Traffic Superintendent and Trainmaster, Dominion Atlantic Ry., Kentville, N.S., born at Caledonia, Ont., Mar. 3, 1874.

W. C. Orchard, Chief Freight Tariff Bureau, C.P.R., Montreal, born in London, Eng., Mar. 16, 1865.

R. Patterson, Master Mechanic G.T.R., Stratford, Ont., born at Brantford, Ont., Mar. 13, 1860.

F. W. Peters, Assistant to 2nd Vice-President, C.P.R., Winnipeg, born Mar. 25, 1860.

E. H. Sewell, City Passenger Agent C.P.R., Sherbrooke, Que., born at Quebec, Mar. 17, 1875.

J. F. Slocum, Secretary-Treasurer International Ry. Co., Buffalo, N.Y., born at Geneva, N.Y., Mar. 25, 1876.

C. J. Smith, General Manager Richelieu and Ontario Navigation Co., Montreal, born at Hamilton, Ont., Mar. 10, 1862.

G. Sommerville, Agent Merchants Line Steamers, Toronto, born at Kingston, Ont., Mar. 21, 1855.

W. Y. Soper, director Ottawa Electric Ry. Co., Ottawa, Ont., born at Oldtown, Me., Mar. 9, 1854.

J. N. Sutherland, ex-General Freight Agent C.P.R., Atlantic Division, Oakville, Ont., born at Sydney, N.S., Mar. 17, 1843.

E. J. Travers, Manager British Columbia Car Service Bureau, Nelson, B.C., born at Hamilton, Ont., Mar. 31, 1872.

W. F. Tye, ex-Chief Engineer C.P.R., Montreal, born at Haysville, Ont., Mar. 5, 1861.

G. W. Vaux, Assistant General Passenger and Ticket Agent G.T.R., Chicago, Ill., born at Montreal, Mar. 21, 1866.

H. Wallis, ex-Chief Mechanical Superintendent G.T.R., Montreal, born at Derby, Eng., Mar. 10, 1844.

D. O. Wood, General Freight Agent for Ontario, Allan Line Steamships, Toronto, born at Kleinburg, Ont., Mar. 16, 1864.

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Discipline on the C.P.R.

The assistant general managers of the eastern and western lines issued circulars as follows, Feb. 1: "Commencing this date, discipline will be admisistered as under: It is the intention to insist on a more rigid compliance with the company's rules and regulations, which are made for the protection of the lives of the public and employes, as well as for the protection of the company's property. All employes will start with a clean record beginning this date. Any exceptional service rendered will be credited to the employe's record. A weekly discipline list will be issued on each division. This list will show cause, extent of discipline, or action and extent of reward. Employes will, as heretofore, be subject to summary dismissal for insubordination, drunkenness on or off duty, using intoxicating liquor when on duty, frequenting saloons or places of low repute, incompetency, dishonesty, failing to carry out train orders and rules respecting train movement. Where previously discipline was meted out by suspension, demerit marks will be placed in the record of an employe. For every repetition of an offence by the employe the number of demerit marks will be doubled. When the demerit marks against any employe number 60, his services will be dispensed with. For every 12 consecutive months' good service, free from demerit marks, an employe will have 20 demerit marks deducted from those that may stand against his record. Employes will be advised when demerit marks are recorded against them, the same as they have hitherto been advised respecting disciplinary measures."

Transcontinental Railway Contracts.

"A Contractor" writes the Toronto Globe as follows: "I have read with interest the advertisement inviting tenders by the Commissioners of the Transcontinental Railway for six sections. The accepted checks to accompany the tenders for three of the sections are to be for $100,000 each, and for two of the sections $75,000 each, and for the other section $150,000. I would like to ask how many contractors or contracting firms there are in Canada that can tender on these different sections, and put up these large checks, and then give the additional security, which means another accepted check in case they are awarded any of the work, and carry it on without getting large accommodation or assistance from the banks, and any business man can tell you what help the banks are ready and willing to give during the present money stringency, and in case the bank furnishes the necessary funds it is the bank that is really the contractor.

"In the opinion of many the Railway Commissioners, while no doubt meaning well, are making two serious mistakes, viz., the work is being let in too large sections, and the checks to accompany the tenders are out of reach of the ordinary contractors, the distance in miles of the six sections now advertised to be let being as follows: 39 miles, 67 miles, 31 miles, 52 miles, 100 miles and 75 miles. It would be much better in many ways if the contracts were let in 10 or 20 mile sections, or, another way, divide the work up in money values to the amount of $100,000 or $200,000, still keeping it in miles, etc. Then there would be a chance for the smaller but competent railway contractor. This would also to a large extent do away with the trouble experienced last year in procuring men or help to do the work, as almost every contractor, or contracting firm, has a number of men or a following that they can place on their contracts, and with these there could and would no doubt be distributed a large number of the unemployed, who have had no experience in railway construction work, but who would soon acquire it.

"Some will say, why not let the ordinary or smaller contractor sub-contract from the party getting the large contract? Now, this is not desirable, for several reasons, one being the ever-present fear of loss, or failure, etc., on the part of the original contractor, which is avoided in case the contract is direct with the Commission.

"The C.P.R. in building their Toronto to Sudbury line, a distance of over 200 miles, did not ask for any check to accompany the tenders received, nor did they require the contractors to whom the different contracts were awarded to put up deposit or security checks, and no doubt they gained in doing this, but they no doubt assured themselves of the competency, financial and otherwise, of the contractors to whom the contracts were given before they awarded them the work.

"There are hundreds of contractors in Canada to-day who could help build the G.T. Pacific Ry., if they were given the opportunity. What is to hinder the half dozen or so firms of contractors that will tender—owing to the large and out of reason security checks that are required—getting together, and the result being that each would get a section?

"In discussing this matter with a member of Parliament he said he understood that one reason why the work was let in such large sections was that it was easier to deal with one firm than with several. This is nonsense. A division engineer has charge of, say, from 50 to 100 miles, while each 10 or 12 miles of railway construction work

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MONTREAL, QUE. **LIMITED**

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RAILWAY FREIGHT AND PASSENGER CARS

OF ALL DESCRIPTIONS

CAR WHEELS—CASTINGS—FORGINGS
AND ALL NECESSARY EQUIPMENT FOR
CAR CONSTRUCTION

Cars Built to Standard Designs or to Customers' Specifications

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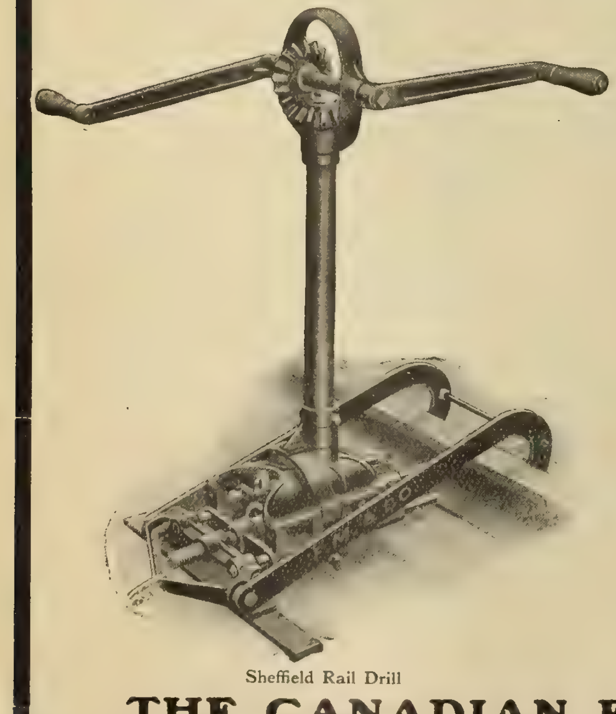
BOX 2286, MONTREAL.

Works: TURCOT

RAILWAY AND CONTRACTORS' SUPPLIES

TRACK APPLIANCES OF ALL KINDS

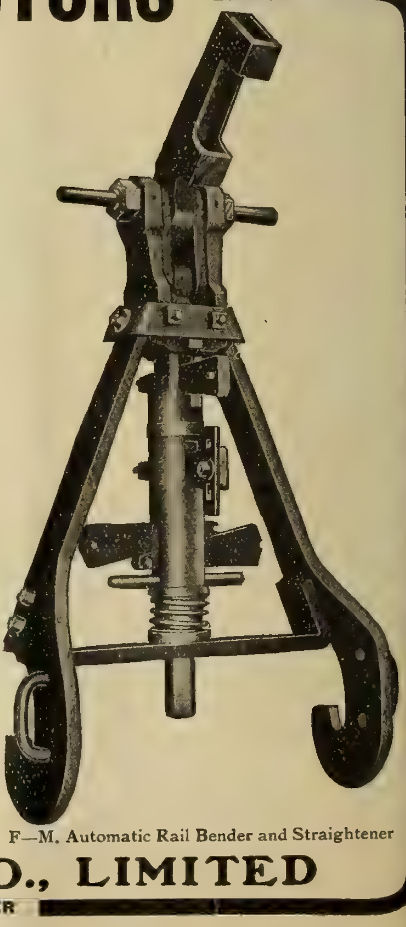


Sheffield Rail Drill

CAR MOVERS AND REPLACERS
TRACK GAUGES
TRACK LEVELS
RAIL SAWS
CLAW BARS
and all miscellaneous
TRACK TOOLS

BARRETT JACKS
LOCOMOTIVE JACK SCREWS
HYDRAULIC JACKS

SHEFFIELD
Inspection Motor Cars
Hand Cars
Velocipede Cars



F—M. Automatic Rail Bender and Straightener

THE CANADIAN FAIRBANKS CO., LIMITED

MONTREAL TORONTO WINNIPEG VANCOUVER

has a resident engineer, and as regards officials or office hands at Ottawa, there is no scarcity, and more can be got if required.

"The net result of the present system will likely be that two or three, or, at the most, a half a dozen wealthy men or corporations will get the whole at higher prices than would otherwise prevail if the work was let in smaller portions, as it should be. The above is not written in an antagonistic spirit to the Dominion Government or the Transcontinental Commission, but with the idea and hope of an improvement."

Toronto Union Station, Tracks, Etc.

A conference was held in Toronto, Feb. 4, between representatives of the C.P.R. and G.T.R., and of the City Council and Board of Trade, on the question of tracks, etc., in connection with the proposed Union Station. The following report, signed by F. P. Gutelius, Assistant Chief Engineer C.P.R.; H. G. Kelley, Chief Engineer G.T.R., and E. Wragge, Consulting Engineer, was presented, with the endorsation of Sir Thos. G. Shaughnessy and C. M. Hays, for the two railway companies:

"The undersigned have considered the question involved in the separation of grades between the streets and the railway lines along the water front of the city of Toronto, and the report thereon of Messrs. Berrian and Moyes, engineers, as presented to the Toronto Board of Trade, and would observe thereon:

"Dealing with the report of Messrs. Berrian and Moyes (as published in THE RAILWAY AND MARINE WORLD of Oct., 1907), the suggestion that four tracks only, except the Union Station tracks, should be elevated along the water front from Bathurst St. Jct. to Cherry and Vine Sts., near the Don River, and that certain service tracks should remain on the present level on both sides of the proposed elevated tracks or viaduct, is open to the objection that the operation of such service tracks will be attended with more danger than the operation of all tracks as at present constructed, owing to the impossibility of any one passing through the subway under the viaduct seeing an engine or cars approaching the crossing on the other side of the viaduct until danger of collision is imminent.

"To reach such service tracks, all train movements of both companies between the main distributing yards and the Esplanade district will require to be made as far east as the Don River, and return through subways under the viaduct. This will involve the movement of all cars over a distance of from 3½ to 3¾ miles and return as compared with one mile and return under present conditions. Assuming that 40,000 cars are handled per annum by both companies, the extra engine and car mileage involved by the proposed change will be 200,000 miles. Owing to the curtailment of the switching facilities and the magnitude of the operations involved, we consider it impracticable to handle even the present business transacted on the Esplanade under the proposed arrangement. These objections apply to the district east of Church St.

"West of Church, as far as York St., on the Esplanade, and southerly, all tracks on the level leading to the wharves and existing industries are eliminated. A subway substituted for the York St. bridge and the eastern portion of the C.P.R. yards is taken away, almost destroying its usefulness, the yard being transformed from a double-ended yard to a stub-end yard. We can see no practical way by which this damage to the C.P.R. yard can be lessened if the viaduct plan is adopted. We have not attempted here to criticize their report in detail, although we find many serious objections and difficulties to which attention has not been given. For example, the bridge at the foot of John St. leading to the city water works, as is admitted, must be removed. Under this arrangement no method of crossing the railway tracks at this point is practicable. A grade of about 8% is required from the top of the present bridge at the foot of Spadina Ave. to the proposed subway under the viaduct, allowing a headway of 12½ ft.

"Dealing with the general principle of track elevation as applied to the existing conditions in the district under consideration, we can see no practicable method of separating grades by means of a viaduct as suggested. If the sidings or team tracks on the Esplanade are elevated, their usefulness is completely destroyed, as they are used for the delivery and receipt of carload freight by teams.

"Under the provisions of the Windmill Line agreement the city is obliged to complete the building of Lake St. easterly from Yonge St., and fill in the extension of the several streets leading thereto from the south side of the Esplanade to Lake St. during 1908. This provides sufficient room south of the Esplanade to admit of the construction of overhead bridges with easy grade leading from Front St. over the railway tracks between Parliament St. and Yonge St.

"We have given careful consideration to the various questions involved in the separation of grades along the water front from the Don River on the east to the Humber River on the west, and we are of the opinion that the following general plan is the best solution possible to provide both for the present and future interests of the public and for the necessities of the railways: Retain the tracks at the present level from the Don River to about Yonge St. and carry the following streets over these tracks by means of steel bridges, viz., Parliament or Berkeley, Sherbourne, Jarvis, Church and Yonge. Eliminate the present level crossings on the Esplanade between the foot of Yonge St. and the foot of Parliament St., and extend Harbor St. parallel with and south of the tracks so as to give the property owners south of the Esplanade free and safe access both easterly and westerly to and from their properties. The rights of the public, if any, to cross the tracks at street extensions where not occupied by bridges to be eliminated and the remaining portions of these street extensions to remain open southerly as far as Lake St., thereby affording access to the bridges over the Esplanade. From Yonge St. west to Simcoe St., it is intended to construct the new Union Station, the tracks diverging from the west side of the Yonge St. bridge and to be slightly elevated to provide for the subway in the new station. This necessitates the removal of the York St. bridge and the erection instead thereof of one at Bay St. of similar construction to that at Yonge St. The substitution of the bridge at Bay St. for the one at York St. will enable the railway tracks to be carried over Yonge St., along Lake St., and back again to Front St. by way of Bay St., thus giving the most convenient access both from the east and from the west to the steamer wharves in that neighborhood. None of these bridges will have an approach exceeding 5%, and several of them will have a grade of 4% or less, this question depending on what is eventually considered to be most desirable for all interests involved as to the headway for railways to be allowed under the several bridges. The present bridge at the foot of John St. to be retained, and the bridge at Spadina Ave. to be extended to cross over the passenger tracks. The present overhead bridges at Bathurst St. and Strachan Ave. to be retained. Commencing at the crossing of the G.T.R. tracks by the C.P.R. branch leading to the Queen's wharf, the present roadway of the G.T.R. to be depressed to a point about 1,000 ft. east of the Sunnyside crossing, provision being made for the necessary tracks thereon, and Dufferin St., Dunn Ave., Jameson Ave., and Dowling Ave., carried overhead by means of bridges. From the same point 1,000 ft. east of Sunnyside crossing to the Humber River, the present tracks to be elevated upon an embankment, subways to be provided for the following highways: Sunnyside crossing, Indian Road, with access to High Park, High Park crossing between mileposts 34½ and 35, and Windermere Ave. All other crossings to be closed.

"In the general plan above outlined our conclusions are supported by the recommendations contained in the report of W. B. Parsons, C. H. Rust and C. B. Smith, presented to the Mayor and Council of the city."

In a communication accompanying the above report the C.P.R. and G.T.R. officials said: "Our companies are prepared to undertake this work in accordance with the recommendations of our engineers, the cost of the whole undertaking between Bathurst St. and the Humber River to be apportioned between the city and the G.T.R., each paying one-half. We would also suggest, as is usual in such cases, that no compensation or damages for lands taken or injuriously affected by any of the proposed work be claimed by any of the parties against the other, or others of them. We propose that the overhead bridges above mentioned shall be constructed by the railway companies on such terms and conditions and with such provisions as to cost as the Board of Railway Commissioners, after hearing the parties interested, namely, the city and the railway companies, may order."

The conference, which lasted for several hours did not end in an agreement, the city representatives insisting on the construction of a viaduct, to which the railways are entirely opposed. The Mayor, having communicated with the Board of Railway Commissioners, has been advised that they will sit in Toronto at an early date to consider the whole question. In the meantime, C. H. Rust, City Engineer, in consultation with I. Randolph, of Chicago, is preparing plans, estimates, etc., for viaduct construction to be submitted to the Commission.

United-States Canadian Through Rates.

In our Feb. issue we gave on page 117 a decision by the U.S. Interstate Commerce Commission, which was published Jan. 17. There was not time to verify it before going to press, but we sent a copy of the paragraph to Washington, and have been favored with a letter from E. E. Clark, one of the Commissioners, as follows:

"Recently the Commission was asked whether it would be lawful for a certain carrier engaged in the transportation of passengers and property between points in the U.S. and points in Canada, to place its tickets on sale with an agent at a point in the U.S. at the rate of 1c. per mile, such tickets to be valid from the first station in Canada across the border and only to be sold to such persons as produce a certificate of the immigration agent of the Canadian Government. This letter of inquiry was brought to the attention of the Commission, as a whole, and it was its view that if such sale of tickets disregarded in any way the terms or rates of any joint tariff, the practice would be unlawful and discriminatory. The newspaper clipping purports to be a quotation, but it is a very liberal and incorrect paraphrase of the Commission's reply to the inquiry. The records of the Commission show that reply was directed to the effect that if they have joint rates from St. Paul to points on their lines they may not depart from those rates by this device and so discriminate, but if they have no such joint through rates, we have no jurisdiction of the fares in Canada."

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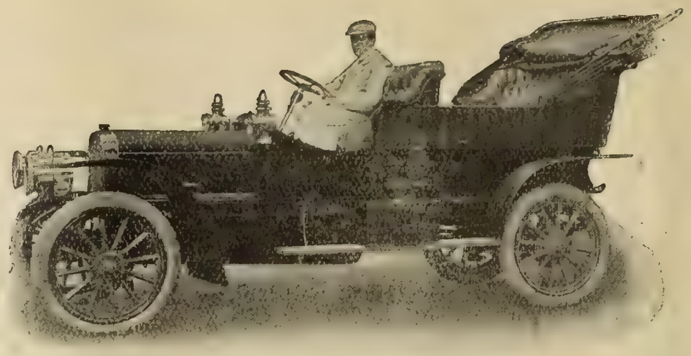

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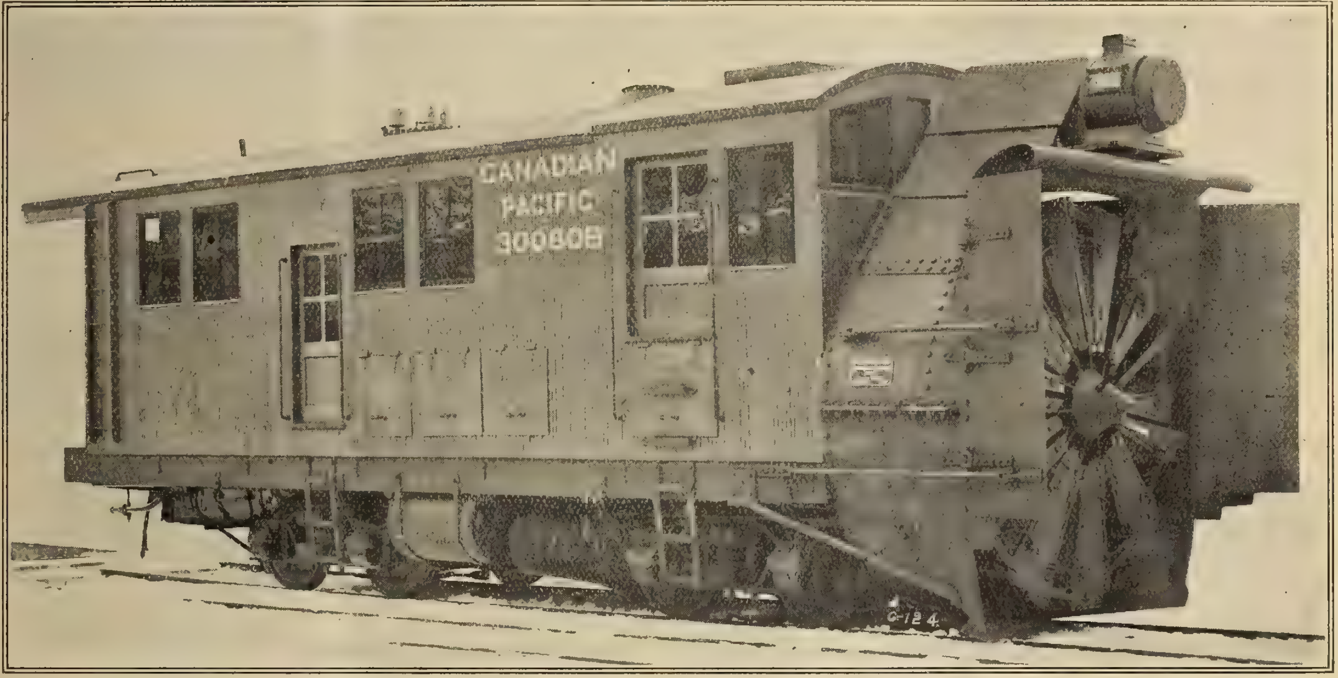
C.P.R. Rotary Snow Plow.

The rotary snow plow illustrated on this page was built last fall for the C.P.R. by the Locomotive and Machine Co. of Montreal, and is in use on the Pacific Division. The machinery is simple and well adapted for the work which it has to perform. The engine consists of two horizontal cylinders with slide valves actuated by the Walschaert valve gear. The boiler is of the locomotive type with Belpaire firebox, and has ample heating surface to give a good margin of steam capacity to meet all requirements. The wheel is driven by means of bevel gears on the main shaft and on the engine shafts. In the design of the wheel, particular attention has been given to reducing the friction of the snow, while passing through, to the lowest possible minimum; and to overcome all possibility of the snow choking or blocking the wheel. The wheel is composed of 10 hollow cone-shaped scoops, the surfaces of which are perfectly smooth, so that it is impossible for the snow to stick in any way. Each scoop is open its entire length on the front side through which the snow is taken in. Knives are hinged one on each side of the opening, arranged so as to adjust themselves automatically into cutting position. The wheel is encased in a drum with a square front or hood, which is so designed as to present no dead surface to be forced into the snow. At the bottom, the hood projects only a few inches in advance of the cutting blades at the circumference of the wheel; while at the centre of the wheel, the knives are the first to encounter the snow. As a result, the whole front of the rotary is a sharp, cutting edge; and the power required to push the plow is very much decreased. The chute in the top of the drum is provided with an adjustable cover, which can be turned to suit the direction in which the wheel is throwing the snow.

The ice-cutters and flangers are connected by iron rods to cranks on the balance shaft, and may be raised and lowered simultaneously by means of an air cylinder. An auxiliary steam connection from the boiler supplies steam to the flanger cylinder in case the air pump is disabled while the rotary is in service. As the wrecking of the ice-cutters or flangers causes serious delays to the rotary while in service, especial attention has been given to reduce this possibility to a minimum. The ice-cutters are in front of the forward trucks and secured to the lower end of two arms of a wrought iron frame by two bolts in each arm. They are composed of two parts, the wing and the cutter. The wing projects over the rail, and the cutter, when in working position, projects down inside the rail in front of the forward wheels of the truck. Tho lower bolt by which the cutter is attached to the frame is so designed that, in the event of the cutter striking an obstruction sufficient to wreck it, this bolt is sheared off, permitting the cutter to turn back and pass over the obstruction. Extra shearing bolts are carried in the tool box of the rotary, and it is only necessary to replace the bolts which have been sheared off to put the ice-cutters in working order. By this device, serious delays resulting from the wrecking of the ice-cutters are prevented. The flangers are hung on the rear end of the frame of the front truck and are made up of two parts, the wings and the flanger points. The flanger points, which go below the rails, are bolted to the bottom of the wings so that in case they strike an obstruction other than snow or ice, the bolts will be broken off and no other injury done to the flanger. Extra flanger points with suitable bolts are carried in the tool box, and it is only necessary to replace the flanger points to put the flanger again in working order.

The frame is of heavy steel I-beams and channels well braced to withstand all strains. The plow is mounted on two four-wheel trucks strongly built with a large margin of strength above the requirements. The rotary is equipped with Westinghouse air brake with 9½ in. pump and large reservoir capable of supplying both air brake cylinder and flanger cylinder. The cab is large and strongly built, with a view to the comfort and safety of the crew. It is partitioned off in front of the boiler, the front compartment being the pilot house, and the rear the engineer's cab. The machinery of the rotary is underneath the floor of the pilot house and is covered with iron plates, to secure the safety of those operating the machine.

Following are the general dimensions: Width of drum, 10 ft. outside; width of cut, 12 ft.; rotary wheel, 9 ft. 8½ in.; boiler, 60 in. diameter outside first course; firebox, 92 by 50 in.; working pressure, 190 lbs.; cylinders, 17 by 22 in.; diameter of truck wheels, 4 ft. 6 in.; centre to centre of trucks, 15 ft. 2½ in.; extreme length of rotary, 38 ft. 3 in.



CANADIAN PACIFIC RAILWAY ROTARY SNOW PLOW.

Steam Railway Mileage.

In the table of railway statistics in our last issue we gave the total mileage as 27,796.80. These figures show the total mileage operated, and includes single track, second track, yard track and sidings, as well as the mileage operated by one company over the lines of another under trackage rights. Deducting the totals of these various mileages the net railway mileage of the Dominion is 22,451.71. Following is the actual single-track mileage of the several railways:

Alberta Ry. and Irrigation Co.	111.82
Albert Southern	19.00
Algoma Central and Hudson's Bay	89.64
Atlantic and Lake Superior	100.00
Atlantic, Quebec and Western	......
Bay of Quinte	89.37
Bedlington and Nelson	23.97
Beersville Coal and Ry. Co	8.63
British Yukon	90.32
Brockville, Westport and North-Western	45.00
Bruce Mines and Algoma	17.28
Buctouche and Moncton	32.00
Brandon, Saskatchewan and Hudson's Bay	69.45
Bessemer and Barry's Bay	5.00
Canada Coals and Ry. Co	12.00
Canada Southern	382.19
Canada Government Railways—	
Intercolonial	1,451.19
Prince Edward Island	267.50
Canadian Northern	2,584.50
Canadian Northern Ontario	146.80
Canadian Northern Quebec	251.60
Canadian Pacific	8,883.30
Cape Breton	31.00
Caraquet	84.78
Carillon and Grenville	13.00
Central Ontario	136.49
Crow's Nest Southern	53.20
Cumberland Ry. and Coal Co	32.00
Dominion Atlantic	277.96
Edmonton, Yukon and Pacific	4.50
Elgin and Havelock	28.00

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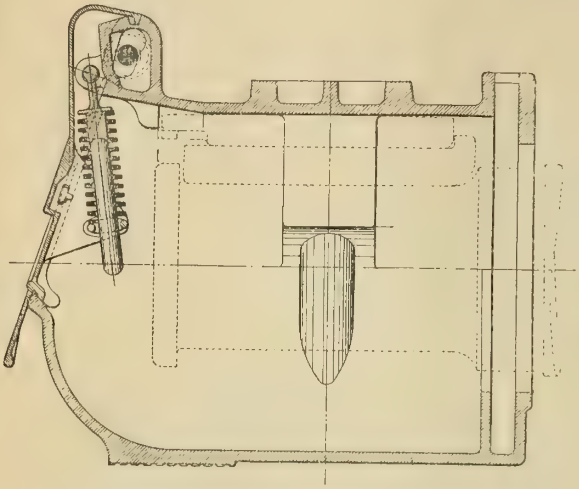

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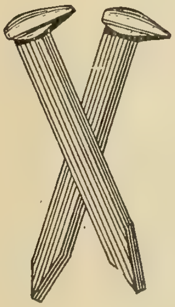
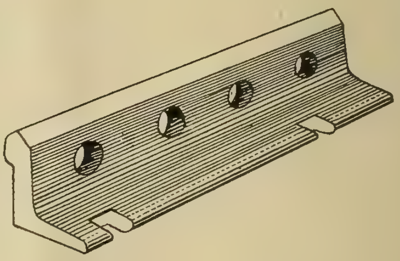


AXLES

CAR AND LOCOMOTIVE

Railway Angle Bars and Track Spikes



FORGINGS MARINE AND RAILROAD

Pig Iron, Iron and Steel Bars

Esquimalt and Nanaimo	78.00
Grand Trunk Pacific	......
Grand Trunk in Canada	3,107.03
Grand Trunk (Canada Atlantic)	451.82
Gulf Shore	......
Halifax and Southwestern	269.21
Hampton and St. Martins	30.00
Hereford	52.85
Hillcrest Ry. Coal and Coke Co	1.50
International Ry. of New Brunswick	29.00
Inverness Ry. and Coal Co	65.50
Irondale, Bancroft and Ottawa	48.00
Kaslo and Slocan	31.73
Kent Northern	27.00
Kettle River Valley	3.86
Kingston and Pembroke	109.80
Klondike Mines	31.50
Lake Erie and Detroit River	222.47
Liverpool and Milton	5.53
Lotbiniere and Megantic	30.00
Magnetawan River	1.91
Manitoulin and North Shore	13.69
Marmora Ry. and Mining Co	......
Massawippi Valley	35.46
Montreal and Atlantic	163.40
Montreal and Province Line	61.13
Montreal and Vermont Junction	23.60
Morrissey, Fernie and Michel	10.85
Midland of Manitoba	77.01
Nelson and Fort Sheppard	55.42
New Brunswick Coal and Ry. Co	58.00
N.B. and Prince Edward Island	36.00
New Brunswick Southern	82.50
New Westminster Southern	24.10
Nosbonsing and Nipissing	5.50
Nova Scotia Steel and Coal Co	12.50
Orford Mountain	48.00
Ottawa and New York	56.90
Phillipsburg Ry. and Quarry Co	6.00
Pontiac and Renfrew	4.25
Princeton Branch, Washington Co. Ry	5.10
Quebec Bridge and Ry. Co	......
Qu'Appelle, Long Lake and Saskatchewan	253.96
Quebec Central	222.00
Quebec and Lake St. John	246.40
Quebec Ry., Light and Power Co	26.00
Quebec, Montreal and Southern	143.75
Red Mountain	9.59
Rutland and Noyan	3.39
Salisbury and Harvey	50.00
Schomberg and Aurora	14.40
Stanstead, Shefford and Chambly	46.23
St. Clair Tunnel	2.25
St. John Valley and Riviere du Loup	6.00
St. Lawrence and Adirondack	46.12
St. Louis and Richibucto	7.00
Sydney and Louisburg	52.74
Temiscouata	113.00
Temiskaming and Northern Ontario	138.90
Thousand Islands	6.33
Toronto, Hamilton and Buffalo	83.67
Vancouver Copper Co	11.75
Vancouver, Victoria and Eastern	74.76
Vancouver, Westminster and Yukon	14.81
Victoria and Sidney	16.26
Victoria Terminal Ry. and Ferry Co	18.38
Wellington Colliery Co	10.75
" " " (Ladysmith Ext'n)	9.94
York and Carleton	5.75
	22,451.74

◆

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug.	835,600	619,200	216,400	240,700+
Sept.	758,300	549,200	209,100	133,900+
Oct.	931,200	621,300	309,900	116,100+
Nov.	957,400	689,100	268,300	215,700+
Dec.	801,100	558,400	242,700	264,900+
	$5,307,900	$3,699,500	$1,608,400	$1,391,800+

Approximate earnings for Jan., $578,200, against $351,400 for Jan., 1907.

◆

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7 010,177.40	4,439,902.25	2,570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct.	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
Dec.	6,418,576.38	4,341,386.80	2,077,189.58	188,404.76−
	$40,885,496.07	$26,454,473.48	$14,431,022.59	$154,844.11−

Approximate earnings for Jan., $4,458,600, against $4,173,000 for Jan., 1907.

Duluth, South Shore and Atlantic Ry.—Gross revenue for Dec., 1907, $217,947.08; operating expenses, $173,542.67; net revenue, $37,669 37; against, $254,643.08, gross revenue; $169,610.56, operating expenses; and $78,716.11 net revenue for Dec., 1906. Gross revenue for six months ended Dec. 31, 1907, $1,781,249.47; operating expenses, $1,277,834 00; net revenue, $453,214.36; interest on bonds, $429,850.00; taxes, $98,491.86; other expenses, $71,693 08; and deficit, $96,619.47; against $1,693,530.75, gross revenue; $1,079,270.71, operating expenses; $576,501.92, net revenue; $429,850.00, interest on bonds; $82,560.95, taxes; $32,815.68, other expenses, and $69,033.41 surplus for same period, 1906. Approximate earnings for Jan., $200,111, against $233,089 for Jan., 1907.

Mineral Range Rd.—Gross revenue for Dec., 1907, $61,499.69; operating expenses, $53,176.72; net revenue, $8,322.97; against $60,789.75, gross revenue; $47,118.03, operating expenses; and $13,551.82, net revenue for Dec., 1906. Gross revenue for six months ended Dec. 31, 1907, $423,663.12; operating expenses, $335,752.05; net revenue, $84,988.24; interest on bonds, $41,680.00; taxes, $20,191.08; other expenses, $13,750 90; surplus, $12,289.09; against $394,661.16, gross revenue; $271,396.29, operating expenses; $121,171.36, net revenue; $41,680.00, interest on bonds; $18,049.97, taxes; $13,291.90, other expenses; and $50,243.00, surplus for same period, 1906. Approximate earnings for Jan., $58,795; against $53,146 for Jan., 1907.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Gross revenue for Dec., 1907, $1,081,117.73; operating expenses, $569,248.33; net revenue, $511,869.40; against $920,497.79, gross revenue; $570,168.30, operating expenses; and $350,329.49, net revenue for Dec., 1906. Gross revenue for six months ended Dec. 31, 1907, $6,773,878.65; operating expenses, $3,945,622.89; net revenue, $2,828,255.76; against, $6,800,536.65, gross revenue; $3,425,633.52, operating expenses; and $3,374,903.13 net revenue for the same period, 1906. Approximate earnings for Jan., $697,283, against $615,176 for Jan., 1907.

◆

Grand Trunk Ry. Earnings, Expenses, etc.

Subject to audit, the accounts for the half-year ended Dec. 31, 1907, show the following results:

Gross receipts		£3,763,200
Working expenses		2,710,900
Net receipts		£1,052.300
Net revenue, less credits		470.500
Balance		£ 581,800
Deduct Canada Atlantic Ry. deficiency	£60,400	
Less, Detroit, Grand Haven and Milwaukee Ry. surplus	5,800	54,600
Surplus		£527,200

This surplus added to the balance of £14,600 from June, 1907, makes a total amount of £541,800 available for dividend, which will admit payment of dividends for the half-year on the 4% guaranteed stock and first and second preference stocks; and of 3% for the year in the third preference stock, leaving a balance of about £6,700 to be carried forward.

The accounts of the Grand Trunk Western Ry. Co. for the half-year show a surplus of £16,000, which is carried forward to the current half-year's accounts.

Approximate earnings for Jan., $2,810,114, against $3,240,854 for Jan., 1906.

◆

C.P.R. Pensions—Sir Thos. G. Shaughnessy, President, issued the following circular recently: "Pursuant to the authority given them by the shareholders the directors have granted pensions to a number of employes who had reached the age limit mentioned in the pension regulations and who had been in the service of the company continuously for 10 years or more, but it was found that in some cases the amount of the pension calculated according to the regulations was insufficient to protect the recipient against want during his declining years, as was intended, and therefore the board has so amended the pension regulations as to provide that from Jan. 1, 1908, and until further notice, the minimum amount of the pension to be paid shall be $20 a month."

Belleville and North Hastings Ry.—In moving in the House of Commons, Feb. 11, for papers relating to the granting and payment of subsidies to the B. and N.H. Ry., W. B. Northrup, M.P., asked the Government to demand back from the G.T.P. Co. $21,000 which he claimed had been obtained improperly, as part of the line was not operated. The Minister of Railways, in reply, said the original sin seemed to have been in granting a subsidy to what had been called a bogus company. The subsidy was granted and paid by the former Government. There ought to be, he declared, some method by which either the Dominion or the Provincial Government should be able to make railways which got subsidies or municipal bonuses carry out their part of the contract. He had not been able to discover the machinery by which the department could deal with a railway company that did not fulfil its contract in respect to subsidies, but he would not be satisfied until he had done so. (Jan., pg. 19.)

Railway Finance, Meetings, etc.

Atlantic and Lake Superior Ry.—The question of winding up the affairs of the A. and L. S. Ry., and of the Baie des Chaleurs Ry., the only part of the line in operation, came before the Exchequer Court at Montreal, Feb. 13. The application is being made in order that Galindez Bros., bankers, of London, Eng., may obtain a clear title to the line, which has been sold to the Atlantic, Quebec and Western Ry. The latter company is constructing an extension of the line from Paspebiac to Gaspe.

Canadian Northern Ry.—A section in the bill before the Dominion Parliament authorizes the increase of the company's capital stock by $19,250,000, which may be called up by the directors from time to time as they deem necessary.

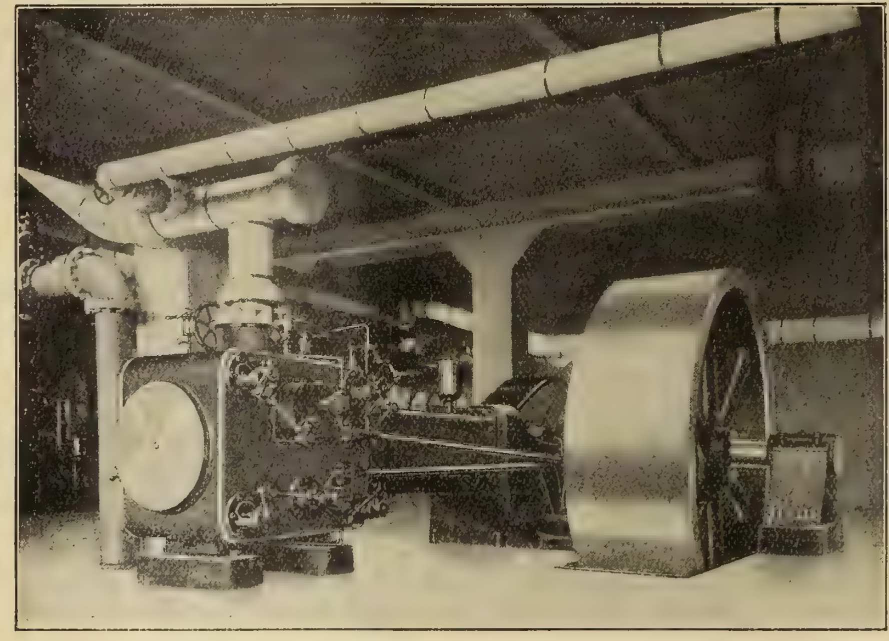
Canadian Pacific Ry.—Warrants have been issued to shareholders for their rights to subscribe for the pending issue of $24,336,000 of the new stock authorized.

At the regular meeting of directors held Feb. 10, the usual dividend of 2% on the preferred stock was declared for the half-year. A half-yearly dividend of 3% on the common stock was also declared, and an additional dividend of ½% on the common stock out of the land department revenue.

Crow's Nest Coal Co.—The annual meeting of shareholders called to be held in Toronto Feb. 14, was postponed for three weeks.

Cumberland Ry. and Coal Co.—The Dominion Parliament is being asked at its current session to amend the company's act of incorporation, chap. 77, of the statutes of 1883, in several particulars. Section 3 of the original act is repealed and a new section substituted. The new section is the same except that power is also given to buy and lease timber lands in Nova Scotia or New Brunswick; to generate electricity and supply light, heat or power produced thereby; to hold stocks, shares and bonds in other companies subject to Sec. 149 of the Railway Act; to sell other real or personal property, and there are a few changes in the wording. It is also declared that the purchase of coal lands, etc., heretofore made shall be declared invalid by reason of any want of power in the company to acquire the same; the company is also authorized to issue bonds in accordance with Sec. 136 of the Railway Act, instead of, as under sec. 7, or the original act, which is repealed. The number of the directors is to be not less than nine or more than 15, and power is given to issue preference stock, and the rights of the holders of such stock are defined. A mortgage of the company's property to the Royal Trust Co., dated Nov. 13, 1907, to secure an issue of bonds to the amount of $1,500,000, is confirmed.

Dominion Atlantic Ry.—The Dominion Parliament is being asked at the current session to pass an act repealing sec. 15 of the company's act of 1900, respecting the issue of promissory notes and bills of exchange, and declaring that the company shall hereafter have the same powers as are conferred by the Railway Act. Sec. 10 of the act of 1900 is also repealed, and a new section is provided fixing the number of directors at three, but giving power to increase the number to five by by-law; one or more of the directors shall be paid, and one or more shall retire annually, the term of office of each director being three years. The date of the annual meeting is altered from Mar. 31 to the second Friday in Oct., beginning in 1909. The directors are also authorized to make contributions, chargeable to working expenditure, to an employes' sick and benefit fund, and to make by-laws for its management.



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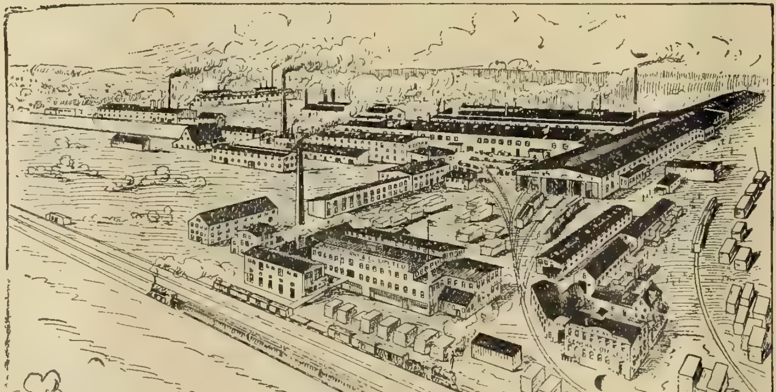

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300 Freight Cars
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4 Snow Plows
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Capacity per Month

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500 Tons Castings
1,000 Tons Forgings
1,000 Tons Bar Iron and Steel

Car Wheels, Axles, Forgings, Castings, Bar Iron & Steel, Etc.

A resolution was passed at the annual meeting of the Middleton, N.S., Board of Trade, memorializing the Dominion Government to acquire the Dominion Atlantic Ry., and operate it as a part of the Intercolonial Ry. In addition to its own line between Truro and Yarmouth, the company operates the line between Windsor and Halifax, 32 miles, under a lease, which the resolution says, "has expired or will shortly expire."

Fraser River Bridge.—Replying to a question in the British Columbia Legislature, Feb. 10, the Minister of Finance said there had been collected in tolls for the use of the bridge over the Fraser River at New Westminster, during 1907, $15,000 from the Great Northern Ry., and $9,830.30 from tolls on foot passengers, vehicles, etc. During the same period there had been paid to toll collectors $3,335.50; four persons were employed as collectors.

Grand Trunk Pacific Ry.—Subscriptions have been invited in Great Britain for an issue of £1,000,000 of 4% debenture stock at £94 per £100 stock, and ranking pari passu with the £1,000,000 of similar stock already issued. The issue is subject to redemption at £105% by the company at any time after Mar. 1, 1936, on giving a year's notice. The amount realized by the sale of the stock is to be used in the purchase of additional rolling stock for the equipment of the railway. Until this rolling stock is required for the G.T.P. Ry. it will be used by the G.T.R. under an arrangement. The issue forms part of a sum of $25,000,000 authorized by chap. 100, of the Dominion statutes of 1906, of which the directors have been empowered to issue £3,000,000 in 4% debentures.

Guelph Junction Ry.—The report of the directors presented at the recent annual meeting showed receipts of $19,224.32, made up of the proportion of gross receipts of the railway received from the C.P.R., which operates the line, for the last quarter of 1906, and the three quarters of 1907, ended Sept. 30, and $2.88 interest. Of this $19,000 had been paid to the city of Guelph on account of interest since the last annual meeting, and $125 before it. The report also says: "While the increase in receipts is gratifying, it must not be overlooked that they are to a considerable extent caused by the construction of the railway and branches to Listowel, and every opportunity should be taken by the citizens of Guelph to avail themselves of the opportunity of using the road in their own interest and that of the city. No doubt the branch from Linwood to Listowel will be opened early in the coming summer, and will very materially add to the traffic of the road, and there is every prospect that the much desired station at Guelph will also be built during the year."

Intercolonial Coal Mining Co.—A dividend of 3½% on the preferred stock and of 4% on the common stock and a bonus of 1% on the latter has been declared, making a dividend of 7% on the preferred and 8% on the common stock, on the operations for 1907. The company owns the Drummond Colliery, Westville, Pictou county, N.S., and operates 10½ miles of railway. J. P. Cleghorn, Montreal, is President, and C. A. Dowd, Secretary.

Kingston and Pembroke Ry.—The annual report of the directors presented at the recent annual meeting showed that a large amount of money had been expended during the year on general improvements along the line. The company, which is controlled by the C.P.R., does not issue a printed report. Following are the officers and directors for the current year: President, W. D. Matthews, Toronto; Vice-President and General Manager, W. R. Baker, Montreal; other directors, A. R. Creelman, K.C., H. P. Timmerman, Montreal; J. Oborne, Toronto; W. Harty, R. V. Rogers, J. B. Walkem, R. Crawford, Kingston, Ont.

Lake Superior Corporation.—The hearing of the final arguments in the application of the Canadian Improvement Co. to set aside the transfer of 50,000 shares of the stock of the Lake Superior Corporation, which it owns, to a number of Philadelphia banks and trust companies now holding the stock as collateral for loans, was commenced in the Vice-Chancellor's Court, Jersey City, N.J., Feb. 12.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—The third instalment of 20% on the subscriptions to the $4,200,000 of new stock authorized to be issued in July, 1907, was paid at New York, Feb. 3. The new stock has been issued to existing shareholders proportionately to their holdings. The C.P.R. takes $2,142,000 of the new stock.

Nakusp and Slocan Ry.—The British Columbia Legislature in 1894 passed an act guaranteeing the principal and interest of 4% 25 year bonds of the N. and S. Ry., to the amount of $647,072 from July, 1893, receiving in return 40% of the gross receipts from the C.P.R., which operates the line under lease. During the fiscal year ended June 30, 1907, the Government received $7,552.11 as its percentage of the receipts, and paid $26,249.26 on account of interest under the guarantee.

New York and Ottawa Ry.—The lease of the N.Y. and O. Ry., which includes the Ottawa and New York Ry., and the company owning the bridge over the St. Lawrence at Cornwall, to the New York Central and Hudson River Ry., has been renewed for one year from Feb. 1908.

Phillipsburg Ry. and Quarry Co.—The Missisquoi Marble Co. was incorporated under the Dominion Companies Act, by letters patent dated July 17, 1907, having power, among other things, to purchase and acquire from the Phillipsburg Ry. and Quarry Co. its property, outside its railway and rolling stock, and also to acquire, own and hold stock in the P. Ry. and Q. Co. The provisional directors are: J. T. Shearer, R. J. Dale, S. H. Ewing, S. Carsley, W. Mann, H. Timmis, Montreal.

Quebec Central Ry.—Gross earnings for Dec. 1907, $75,440.22; expenses, $63.342.90; net earnings, $12,097.32; against, $59,014.75, gross earnings; $51,160.63, expenses; and $7,854.12 net earnings for Dec., 1906. Gross earnings for 12 months ended Dec. 31, 1907, $1,012,233.22; net earnings, $314,402.05; against, $904,865.49 gross, and $321,949.50 net, for same period 1906.

Quebec, Montreal and Southern Ry.—The Delaware and Hudson Co. has borrowed $8,000,000 in New York at 4½% for six months, the proceeds of which were to be used to take up $6,000,000 of one-year notes of the Q., M. and S. Ry., due in Feb., and $2,000,000 of similar notes falling due in Mar. A plan is under consideration by the directors for some permanent form of financing this loan.

Quebec Southern Ry.—South Shore Ry.—At a sitting of the Exchequer Court, at Montreal, Feb. 13, claims of creditors of these two lines were adjudicated upon. These lines were, prior to their sale by order of the court, amalgamated, and at the sale were purchased for the Delaware and Hudson Co. An act of Parliament was subsequently obtained incorporating a company with the title of the Quebec, Montreal and Southern Ry., to take over and operate these lines.

Shuswap and Okanagan Ry.—Under the Shuswap Railway Guarantee Act the British Columbia Legislature guaranteed the interest of the 4% bonds of the S. and O. Ry., amounting to $1,249,760 for 25 years from July 1, 1890, receiving in return from the C.P.R. as lessee of the railway 40% of the gross receipts. During the financial year ended June 30, 1907, the amount received by the Government from the operation of the railway was $33,726.39, and the amount paid under the guarantee was $51,202.50.

Temiscouata Ry.—Traffic receipts for Dec., 1907: Passenger, $3,899.95; freight, $11,772.53; mails and sundries, $676.60; total, $16,349.08.

Temiskaming and Northern Ontario Ry.—The net revenue for 11 months ended Nov. 30, 1907, was $192,380, exclusive of $28,005 received from royalties. The gross receipts amounted to $778,478; and the expenses $586,098.

Traffic receipts for Nov., $65,496; operating expenses, $54,326; for Dec., traffic receipts, $75,041.31; operating expenses, $59,314.52.

Toronto, Hamilton and Buffalo Ry.—Approximate earnings for Jan.: Passenger, $17,797.26; freight, $55,800.85; mail and express, $4,800.00; against, $17,904.94 passenger; $33,034.09 freight, and $4,256.84 mail and express, actual, for Jan., 1907.

Railway Rolling Stock Notes.

The Intercolonial Ry. has 112 refrigerator cars available for dairy and perishable produce.

The Crossen Car Mfg. Co., Cobourg, Ont., has completed delivery of 100 of the 400 box cars ordered by the Intercolonial Ry.

The North Shore Rd., which has taken over the Beersville Ry. in New Brunswick, will shortly, according to press reports, purchase a new locomotive.

The Montreal Locomotive Works has delivered six consolidation locomotives of 100 tons each, and 11 ten-Rheeled locomotives, 97½ tons each, to the Canadian Northern Ry.

The Canadian Locomotive Co., Kingston, Ont., between Jan 13 and Feb. 13, delivered 4 consolidation engines to the Intercolonial Ry., and two 8-wheeled locomotives to the Quebec Central Ry.

J. D. McArthur Co., Ltd., Winnipeg, have ordered from the Hart-Otis Car Co., Montreal, one Hodger double plow distributing car, 32 ft. long, standard specifications. It is being built by the Canada Car Co., Montreal.

The Hart-Otis Car Co., Montreal, has sold to the Corbett-Floesch Co., sub-contractors on the National Transcontinental Ry., New Brunswick division, 20 Hart convertible ballast cars, 40 tons capacity. They will be exactly the same as those furnished the G.T. Pacific Ry.

It is estimated that of the 284,188 freight cars and 5,457 passenger cars built in the U.S. and Canada during 1907, by manufacturers, there were built in Canada 9,159 freight cars and 186 passenger cars. In 1906 the total number of cars built in outside shops was 243,670 and in 1905, 168,006.

The C.P.R. between Jan. 18 and Feb. 18 received the following additions to rolling stock: 107 box cars, 18 box baggage cars, 204 flat cars, 1 first-class car, 2 Pacific type locomotives from its Angus, Montreal, shops; 4 vans from its Farnham, Quebec, shops, and 141 steel coal cars from the Dominion Car and Foundry Co., Montreal.

J. D. McArthur Co., Ltd., Winnipeg, have ordered from the Hart-Otis Car Co., Montreal, 50 Hart convertible ballast cars, 40 tons capacity, 34 ft. long. They are to be precisely the same as those ordered last year, the general dimensions being the same as those

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Machine Designer
Electrical Engineer
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ordered by the G.T. Pacific Ry. They are being built by the Canada Car Co., Montreal.

The Intercolonial Ry., between Jan. 15 and Feb. 20, received the following additions to rolling stock: 146 box cars, 80,000 lbs. capacity; 114 platform cars, 80,000 lbs. capacity; 8 refrigerator cars, 60,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; 64 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont., and 20 platform cars, 80,000 lbs. capacity.

The C.P.R. between Jan. 18 and Feb. 18 placed the following orders for rolling stock: 1 clearance car, 1 pile driver, 1 switching locomotive, 3 baggage and smoking cars, 3 mail and express cars, 6 mail cars, 1 freight refrigerator car, 6 stock cars, 129 flat cars, at its Angus, Montreal, shops; 8 vans at its Farnham, Quebec, shops; and 400 Hart-Otis convertible ballast cars, particulars of which are given elsewhere on this page, with the Dominion Car and Foundry Co., Montreal.

The Intercolonial Ry. has ordered 300 box cars, 60,000 lbs. capacity. Of these 100 will be built by Rhodes, Curry & Co., Amherst, N.S.; 50 by the Crossen Car Manufacturing Co., Cobourg, Ont., and 50 by the Canada Car Co., Montreal; 10 refrigerator cars to be built by Rhodes, Curry & Co., Amherst, N.S. They will be of M.C.B. standard dimensions, and amongst special appliances will have Westinghouse air brakes, steel couplers, Simplex bolsters, and Simplex brake beams.

Following are the general dimensions, etc., of the 50 box cars being built by the Canada Car Co., Montreal, for the Intercolonial Ry.:

Capacity	60,000 lbs.
Length, inside	36 ft.
“ over end sills	36 ft. 9⅝ ins.
Width, inside	8 ft. 6 ins.
“ over side sills	9 ft. 0⅝ ins.
Height, inside	8 ft.
“ to top of running board	13 ft. 3¼ ins.
Body and underframe	wood.
Trucks	I.C.R. standard.
Body and truck bolsters	Simplex.
Brake beams	Simplex
Air brakes	Westinghouse.
Journal boxes	McCord malleable.
Journal bearings	Canadian Bronze Co.
Side bearings	Simplex (Susemihl).

The C.P.R. having decided to light all its passenger cars with Pintsch gas instead of acetylene gas, the Pintsch Compressing Co. has arranged for charging facilities on the C.P.R. in connection with its plants at Montreal and Toronto. The Pintsch Co. has also installed plants at Winnipeg, Man.; Moose Jaw, Sask., and Vancouver, B.C. The cars have been equipped with 8,000 single mantle lamps by the Safety Car Heating and Lighting Co. In a test of these lamps at the Steven's Institute, Hoboken, N.J., a short time since, the hourly consumption of Pintsch gas was found to be 2.12 cubic feet an hour, giving an illumination of 99.5 candle power at a cost of a cent an hour.

The Intercolonial Ry. has ordered from the Dominion Car and Foundry Co., Montreal, to be built under license from the Hart-Otis Car Co., 100 fifty-ton Otis type, rolling shaft, level floor dump cars. Following are the general dimensions, etc.:

Length, over end sills	38 ft. 10 ins.
“ inside	36 ft. 9½ ins.
Width, extreme	10 ft. 0¼ ins.
“ inside	9 ft. 7 ins.
Height inside	4 ft. 6 ins.
Height from top of truck to top of car	8 ft. 10½ ins.
Capacity	50 tons.
Air brakes	Westinghouse.
Couplers	cast steel.
Truck bolsters	Simplex.
Brake beams	Simplex.
Side bearings	Susemihl.
Journal boxes	McCord.

These cars will be used for hauling coal and also as general purpose cars. They will be exact duplicates of the last 500 steel coal cars supplied to the C.P.R.

Following are the general dimensions, etc., of the 10 passenger locomotives, which the C.P.R. is building at its Angus, Montreal, shops, the order for which was mentioned in our Feb. issue:

Type	Pacific 4-5-2.
Weight, on drivers	139,300 lbs.
“ total	212,300 lbs.
Diam. of cylinders	21 ins.
Stroke of pistons	28 ins.
Diam. of drivers	69 ins.
Type of boiler	radial stayed, wagon top.
Working pressure	200 lbs.
Heating surface	2,957 sq. ft.
Tubes, number	22 of 5 ins., and 193 of 2¼ ins.
“ length	19 ft. 6 ins.
Firebox, length inside	7 ft. 10⅛ ins.
“ width	5 ft. 9⅞ ins.
Grate area	45.6 sq. ft.
Tank capacity	5,000 imp. gals.
Coal capacity	10 tons.
Simple superheater	Vaughan and Horsey.
Air brakes	Westinghouse.
Axles	Krupp and openhearth steel.
Brake beams	Simplex.
“ shoes	C.P.R. standard.
Couplers	pilot, Washburn; tender, Tower.
Headlight	Pyle National Electric
Journal bearings	C.P.R. standard.
Springs	C.P.R. crucible steel.
Steam gauges, 6¾ ins., 400 graduated vertical reading dial.	
Tyres, driving-wheel, Standard Steel Co.	crucible steel.
“ engine truck wheel	“ “
“ tender wheel	“ “
Wheel centres	cast steel.

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International Railway Ownership.

The question of the control and ownership of railways in the United States by Canadian railways has been brought before the U.S. Senate by Senator Tillman. The resolution he submitted was in the following terms: "That the Interstate Commerce Commission is directed to inform the Senate whether any corporations engaged in interstate commerce are the owners of any of the capital stock of other corporations which are transporting passengers and freight; and, if so, the Commission is further directed to transmit a statement showing the extent and details of such ownership so far as the facts now appear in the office of the Commission, and to state in what cases the corporations whose stock so owned have been competitors for traffic with the corporations owning their stock."

In this connection it may be of interest to notice that there are four railway companies and one transportation company—three Canadian and two British corporations—having their principal lines in Canada which own or control and operate railways in the U.S. These companies, with the lines operated and mileages, are:

	Miles	Miles
CANADIAN NORTHERN RY.—		
Minnesota - Ontario boundary near Rainy River, to Minnesota-Manitoba boundary		43.6
CANADIAN PACIFIC RY.—		
Maine-Quebec boundary to Maine-New Brunswick boundary (1)	201.00	
Minneapolis, St. Paul and Sault Ste. Marie Ry. (including spur lines) (2)	2,262.88	
Duluth, South Shore and Atlantic Ry. (including Mineral Range Ry.) (3)	590.68	
		3,054.56
GRAND TRUNK RY.—		
Vermont-Quebec boundary to Portland, Me.	174.00	
Grand Trunk Western Ry	336.00	
Detroit, Grand Haven and Milwaukee Ry	189.00	
Central Vermont Ry (4)	612.00	
Toledo, Saginaw and Muskegon Ry	116.00	
Cincinnati, Saginaw and Muskegon Ry.	53.00	
Detroit and Toledo Shore Line Rd (5).	78.00	
		1,558.00
KETTLE VALLEY LINES.—		
B.C.-Washington boundary south of Grand Forks to Republic, Wash. (6)		36.14
WHITE PASS AND YUKON ROUTE.—		
Skagway to White Horse Summit, Alaska		20.38
Total		4,712.68

(1) This mileage includes the Maine Central Rd line between Mattawamkeag and Vanceboro, Me., over 43.8 miles of which the C.P.R. has running rights. (2) The mileage given does not include trackage rights over 19.17 miles of terminal property in Minneapolis, St. Paul and Sault Ste. Marie. (3) The mileage given includes 9.64 miles of trackage rights. (4) The Central Vermont Ry. mileage includes 125.20 miles of line in Canada. (5) The Detroit and Toledo Shore Line Rd. is owned jointly by the G.T.R. and the Toledo, St. Louis and Western Rd. (6) The Kettle Valley Lines are being extended from Republic to Seattle, Wash., the surveys being practically completed.

On the other hand there is a considerable mileage of railway lines in Canada owned or controlled and operated by railway companies having their principal lines in the U.S. There are nine operating companies in the U.S. having altogether 29 lines of railway in Canada, the total mileage being 1,665.99 miles. Of these operating companies the Boston and Maine Rd. and the Maine Central Rd. are controlled by the New York, New Haven and Hartford Rd.; the Michigan Central Rd., the New York Central Rd. and the Rutland Rd. are owned by the Vanderbilt interests; and the Central Vermont Ry. is controlled by the G.T.R., a British corporation operating both in Canada and the United States. The Great Northern Ry. owns the largest mileage, and is engaged in the construction of a number of extensions of its lines with the apparent object of securing a through line north of the International Boundary between Winnipeg and Vancouver. The Delaware and Hudson Co. was the last of the U.S. lines to secure Canadian connections, and it also is engaged in constructing an extension of its existing lines—about 90 miles being under contract or survey. Following is a list of the U.S. railways, together with details of their mileage in Canada:

		Miles	Miles
BOSTON AND MAINE RD.—			
Massawippi Valley Ry			34.46
CENTRAL VERMONT RY.—			
Montreal and Province Line, formerly Montreal, Portland and Boston Ry.		58.60	
Montreal and Vermont Jct. Ry		23.60	
Stanstead, Shefford and Chambly Ry.		43.00	
			125.20
DELAWARE AND HUDSON CO.—			
Quebec, Montreal and Southern Ry., formerly United Counties Ry., East Richelieu Valley Ry. and South Shore Ry		143.75	
Napierville Junction Ry		28.30	
			172.05
GREAT NORTHERN RY.—			
Bedlington and Nelson Ry		15.30	
Crow's Nest Southern Ry		53.20	
Kaslo and Slocan Ry		31.08	
Nelson and Fort Sheppard Ry		55.42	
New Westminster Southern Ry		24.10	
Red Mountain Ry		9.59	
Vancouver, Victoria and Eastern Ry. and Navigation Co		74.76	
Vancouver, Westminster & Yukon Ry.		14.81	
Victoria and Sidney Ry		16.26	
Victoria Terminal Ry. & Ferry Co.		18.40	
Brandon, Saskatchewan and Hudson's Bay Ry		69.45	
MIDLAND RY. OF MANITOBA.—			
Portage La Prairie Line	77.01		
Walhalla Line	15.54		
		92.55	
			474.92
MAINE CENTRAL RD.—			
Hereford Ry. (including Dominion Lime Co.'s line)		53.30	
Princeton Branch Washington Co. Ry.		5.10	
			58.40
MICHIGAN CENTRAL RD.—			
Canada Southern Ry		359.24	
Sarnia, Chatham and Erie Ry		7.00	
Leamington & St. Clair Ry		15.95	
			382.19
NEW YORK CENTRAL AND HUDSON RIVER RD.—			
Ottawa and New York Ry		56.90	
St. Lawrence and Adirondack Ry.		46.12	
Toronto, Hamilton and Buffalo Ry. (control)		83.67	
			186.69
PERE MARQUETTE RD.—			
Lake Erie and Detroit River Ry., including Erie and Huron Ry		204.69	
London and Port Stanley Ry. (leased)		24.00	
			228.69
RUTLAND RD.—			
Rutland and Noyan Ry.			3.39
Total			1,665.99

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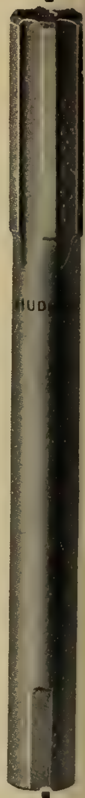
T. P. Phelan, President of the Canada Railway News Co., has bought the Cedar Grove stock farm at Oakville, Ont., containing 393 acres. As well as conducting the breeding establishment carried on by the former owner, Mr. Giddings, with one of the best stock horses in Canada, imported Bessetlaw, at its head, it is the intention to establish a dairy and fruit farm on a large scale, for the purpose of supplying butter, milk, etc., to the various hotels and restaurants on the G.T.R. and other lines operated by the Canada Railway News Co.



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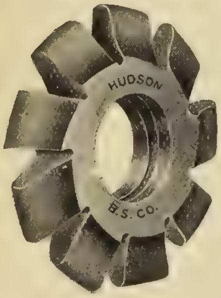

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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

4254. Jan. 17.—Authorizing St. Mary's and Western Ry. Co. to cross the G.T.R. track by a subway about 3,500 ft. south of the G.T.R. station, St. Mary's, Ont.

4255. Dec. 9.—Authorizing G.T.R. Co. to take certain lands in the Parish of St. Antoine de Longueuil, St. Lambert, Que.

4256. Jan. 21.—Authorizing Bell Telephone to carry its wires across G.T.R. near Milton, Ont.

4257 and 4258. Jan. 21.—Authorizing Bell Telephone Company to maintain certain crossings over G.T.R. and C.P.R.

4259. Jan. 21.—Authorizing C.P.R. to reconstruct a bridge on its Woodstock, N.B., section, over Little Shikitikauk River.

4260. Jan. 21.—Authorizing C.P.R. to construct a bridge over Lemon Creek, on its Slocan Lake branch, B.C.

4261. Jan. 21.—Authorizing City of Toronto to lay sewer pipes under G.T.R. track at Sunnyside Ave.

4262. Dec. 19.—Ordering Canada Atlantic Ry. Co. to construct and operate a spur line to A. Pilon's premises, Casselman, Ont.

4263. May 9.—Dismissing application of A. J. Eckardt for an order to vary clause 7 of the order dated Nov. 23, 1905.

4264. Jan. 22.—Authorizing East Middlesex Telephone Co-operative Association to place its line across C.P.R. in West Nissouri tp., Ont.

4265. Jan. 22.—Authorizing the C.P.R. to construct its railway across the public highway on its Haley's ballast pit spur, from its main line east of Renfrew, Ont.

4266. Jan. 23.—Authorizing Welland County Telephone Co. to place wires across the G.T.R. at the 6th road crossing west of Bridgeburg, Ont.

4267. Jan. 23.—Authorizing Welland County Telephone Co. to place aerial wires across the G.T.R. at Windmill Point, Ont.

4268. Jan. 22.—Authorizing G.T.R. Co. to cross with its additional track, on Ferguson Ave., the two tracks of the Hamilton St. Ry. on Barton St., Hamilton, Ont.

4269. Jan. 25.—Authorizing C.P.R. to open for traffic that portion of the main line of its railway between Markstay and Stinson, Lake Superior Division, 7 miles, grade revision.

4270. Jan. 27.—Varying order 3499, Aug. 7, 1907, in connection with two spurs of Vancouver, Westminster and Yukon Ry., in Vancouver, B.C.

4271. Jan. 27.—Extending time of Vancouver and Yukon Ry. for the use of crossing at rail level of the B.C. Electric Ry. on Park Ave., Vancouver, B.C., for 18 months.

4272. Jan. 22.—Requiring Canadian Northern Ry. to remove its station in Fort William, Ont., from its existing location to a location clear of the intersection of Victoria Ave. with Vickers St., and to complete the work on or before Jan. 31, 1908.

4273. Jan. 29.—Authorizing G.T.R. to construct and operate spurs or sidings in Humberstone tp., Port Colborne, and Wainfleet tp., Ont.

4274. Jan. 29.—Authorizing C.P.R. to construct and operate a spur line from its main line near Bordeaux, Que., to the new gaol site.

4275. Jan. 30.—Extending time for use of G.T. Pacific Ry. freight standard mileage tariff, from Jan. 31, 1908, until such time as the Board shall otherwise order or direct.

4276. Jan. 31.—Authorizing Toronto and Niagara Power Co. to place wires for the transmission of 12,000 volts of electrical power, over the Michigan Central Ry. in Stamford tp., Ont.

4277. Jan. 30.—Authorizing chairmen of official, western and southern classifications to file with the Board copies of each of said classifications and supplements on behalf of railway companies which file with the Board international freight tariffs subject to these classifications. Such authority to be by power of attorney.

4278. Jan. 29.—Authorizing Bell Telephone Co. to place wires across G.T.R. near Lachine, P.Q.

4279. Jan. 31.—Authorizing Bell Telephone Co. to place wires across G.T.R. ¾ mile west of Weston station, Ont.

4280. Jan. 28.—Authorizing Brandon, Saskatchewan and Hudson's Bay Ry. to open for traffic its transfer track connecting the C.P.R. main line between 18th and 26th Sts., Brandon, Man.

4281. Jan. 28.—Authorizing C.P.R. to construct its railway across highway on its Hudson's Bay Mining Co.'s spur at Bienfait, Sask.

4282. Jan. 29.—Approving revised location of C.P.R. Pheasant Hills branch between old mileage 528 and 543.3.

4283. Jan. 29.—Approving revised location of C.P.R. main line, at mileage 85.4 east of Sparwood, B.C.

4284. Jan. 31.—Authorizing C.P.R. to construct spur to Black Lumber Co.'s premises, Winnipeg, Man.

4285. Jan. 31.—Authorizing C.P.R. to construct spur to Keewatin Lumber Co.'s premises, Winnipeg, Man.

4286. Jan. 29.—Authorizing Canadian Northern Ry. to construct spur in Virden, Man.

4287. Jan 31.—Authorizing Canadian Northern Ry. to take part of lot 5, con. 4, McKim tp., Ont., for the purpose of constructing a transfer track to connect its track with the C.P.R. track in Sudbury, Ont.

4288. Jan. 31.—Authorizing C.P.R. to construct a spur to the Page-Hersey Iron and Tube Co.'s premises, Guelph, Ont.

4289. Jan. 31.—Authorizing C.P.R. to construct a spur to R. H. Hill's premises, Caledon tp., Ont.

4290. Jan. 31.—Authorizing C.P.R. to construct spur to R. & H. Shortreed's premises, Medonte tp., Ont.

4291. Jan. 31.—Authorizing C.P.R. to construct a spur to the Wabasso Cotton Co.'s premises, Three Rivers, Que.

4292. Jan. 31.—Granting certificate to Vancouver, Victoria and Eastern Ry. and Navigation Co. to correct error made in plan, profile and book of reference covering located line of railway between Brownsville and Oliver's, B.C.

4293. Feb. 1.—Approving standard passenger tariff Kingston and Pembroke Ry.'s C.R.C. 86, making rate of 3 cents a mile.

4294. Jan. 30.—Amending order of Dec. 10, 1907, in connection with transfer of passengers and mails between C.P.R. and G.T.R. trains at Brockville, Ont., so as to require the two railways to fully provide for this connection on or before Mar. 1, 1908.

4295. Feb. 3.—Authorizing Dominion Car and Foundry Co. to lay water pipe under G.T.R. Lachine canal bank branch, near Montreal.

4296. Jan. 24.—Authorizing G.T. Pacific Ry. to construct its railway at grade across highway at eight different points in Alberta.

4297. Jan. 31.—Authorizing C.P.R. to use for railway purposes, and to lay tracks on Hallowell and Selby Sts., and Bethune Ave., Westmount, Que., and on a portion of Ann St., Montreal.

4298. Feb. 5.—Authorizing Walkerton and Lucknow Ry. to cross certain public roads in Brant tp., Ont.

4299. Feb. 4.—Authorizing G.T.R. to construct spur to J. Oliver & Sons' premises Hintonburg, Ont.

4300. Feb. 4.—Authorizing Toronto, Hamilton and Buffalo Ry. to construct spur to J. H. Precious' premises, Hamilton, Ont.

4301. Feb. 4.—Dismissing application of J. M. Leblanc, of Port Daniel, Que., as to approving and sanctioning of location of Atlantic, Quebec and Western Ry. station in Port Daniel Centre.

4302. Feb. 4.—Approving location of Atlantic, Quebec and Western Ry. at Port Daniel, Quebec.

4303. Feb. 5.—Authorizing C.P.R. to construct eight bridges: over Belly River, Lethbridge, Alta.; over Carpenter Creek, B.C.; over Mud branch Thames River, Ont.; over Thames River, Ont., at Huron St. crossing, Embro, Ont.; on Brockville branch, Ont.; over Badger Creek, Man., and at Woodbridge, Ont.

4304. Feb. 5.—Authorizing Gowancroft Telephone Co. to erect wires over C.P.R. near Pilot Mound, Man.

4305. Feb. 4.—Authorizing C.P.R. to construct spur to R. and T. Fairbanks & Co.'s premises, Sherbrooke, Que.

4306. Feb. 4.—Approving location of Esquimalt and Nanaimo Ry. from Koksilah station to Cowichan harbor, also a section from Duncan to Cowichan Lake, B.C.

4307. Feb. 4.—Approving Quebec, Montreal and Southern Ry. Co.'s by-law authorizing the President or Vice-President and General Manager to issue tariffs of tolls to be charges for traffic.

4308. Feb. 5.—Authorizing Great North-Western Telegraph Co. to erect its wires across C.P.R. tracks at Almonte, Ont.

4309. Feb. 4.—Authorizing C.P.R. to construct a spur to the Superior Portland Cement Co.'s premises, Crombies, Ont.

4310. Feb. 5.—Authorizing G.T.R. to construct spur to the Smart Bag Co.'s premises, Toronto, and cancelling previous order 4230, dated Jan. 14th, in this connection.

4311. Jan. 24.—Authorizing C.P.R. to lay tracks across 21 highways on the Teulon extension of its Stonewall branch, Man.

4312. Feb. 5.—Authorizing G.T. Pacific Ry. to lay its tracks across 37 highways in Alberta, from mileage 56.039 to 102.730.

4313. Feb. 1.—Approving plan of C.P.R. abutments and piers of proposed bridge over Pine St., Woodbridge, Ont.

4314. Feb. 5.—Approving local standard passenger tariff C.R.C. 285 of Canadian Northern Ry., providing for a standard passenger fare between all stations in Canada, Edmonton east thereof, of 3c. per mile.

4315. Feb. 6.—Authorizing Bell Telephone Co. to place its wires across the C.P.R. track near Lepage, Que.

4316. Feb. 6.—Authorizing Davis Acetylene Gas Co., Toronto, to lay a pipe under G.T.R. tracks at King City, Ont.

4317. Feb. 6.—Authorizing C.P.R. to construct spur to A. Merner's premises, Alliston, Ont.

4318. Feb. 6.—Authorizing the township of York, Ont., to lay a sewer pipe under C.P.R. tracks on Spadina Rd.

4319. Feb. 12.—Authorizing C.P.R. to construct bridge over Fraser River at mile 0.72, Mission branch, B.C.

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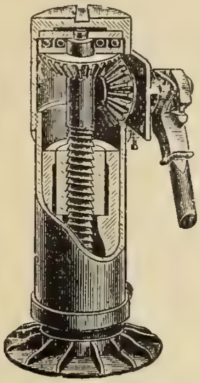
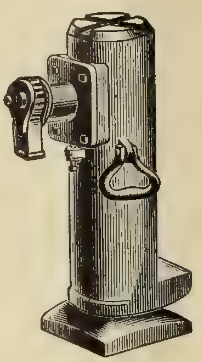


Sectional View



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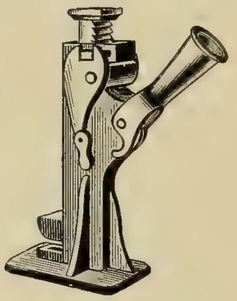

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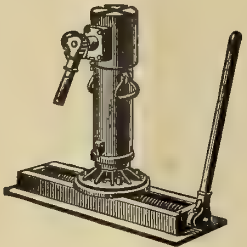

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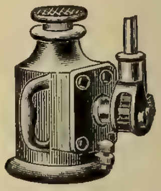

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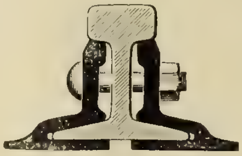

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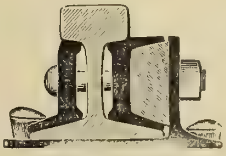

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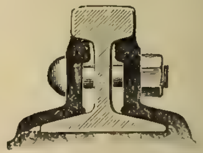

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4320. Feb. 12.—Approving revised location of Esquimalt and Nanaimo Ry. north of Wellington, B.C.

4321. Feb. 12.—Authorizing Bell Telephone Co. to erect wires across C.P.R. at Beachville station, Ont.

4322. Feb. 8.—Authorizing Woodstock Electric Ry., Light and Power Co. to erect wires across C.P.R. at King St., Woodstock, N.B.

4323. Feb. 8.—Approving Atlantic, Quebec and Western Ry. location in townships of Perce, Mal Baie, and Douglas, county Gaspe, Quebec, mileage 60 to 90.

4324. Feb. 8.—Approving of Ottawa Electric Ry. Co.'s by-law 8, authorizing its Secretary-Treasurer to prepare and issue tariff of tolls to be charged for carriage of passengers.

4325. Feb. 6.—Authorizing C.P.R. to construct bridge at highway crossing at Bala, Ont.

4326. Feb. 8.—Authorizing C.P.R. to open for the carriage of traffic the portion of its Pheasant Hill branch between Lanigan at mileage 254.5 from Kirkella, and Saskatoon at mileage 328.4, in Saskatchewan.

4327. Feb. 8.—Approving agreement between Great North-Western Telegraph Co. of Canada and Central Vermont Ry. Co., respecting carriage of poles and other material of the telegraph company.

4328. Oct. 29, 1907.—Authorizing Chatham, Wallaceburg and Lake Erie Ry. to carry its railway, power, telegraph and telephone lines across and along the Pere Marquette Ry. track on the town line between townships of Hardwich and Raleigh, Ont., and to operate the said crossing until May 31, 1908.

4329. Feb. 6.—Approving Atlantic, Quebec and Western Ry. location, sec. 3, mileage 20 to 30.8 and sec. 10, mileage 90 to 102.4, through the townships of Douglas and York, County Gaspe, Que.

4330. Feb. 10.—Authorizing Thessalon Lumber Co. to operate its cars across C.P.R. Sault Ste. Marie branch, about 2½ miles east of Dayton, Ont.

4331-4333. Feb. 12.—Authorizing Winnipeg Electric Ry. Co. to erect its wires for transmission of electrical energy across C.P.R. tracks in St. Boniface, Man.; in sec. 25, tp. 12, range 8 east of 1st meridian, and in sec. 35, tp. 13, range 9, east of 1st meridian, Manitoba, for two months from Feb. 12, 1908.

4334. Feb. 12.—Authorizing the Town of Tillsonburg, Ont., to lay a water pipe under G.T.R. track.

4335. Feb. 5.—Authorizing G.T.R. to construct a spur line to the People's Specialty Co.'s premises, Grand Ligne, Que., and rescinding order 4013 of Nov. 15, 1907.

4336. Feb. 7.—Authorizing C.P.R. to construct a spur to the Standard Paint Co.'s premises near Highland, P.Q.

4337. Feb. 12.—Authorizing Bell Telephone Co. to carry its wires over the Canadian Northern Ry. 8¼ miles west of Winnipeg, Man.

4338. Feb. 6.—Authorizing G.T. Pacific Ry. to carry its railway across public highway crossing at mileage 85.2 between secs. 13 and 14, tp. 51, range 20, west of 4th meridian.

4339. Feb. 12.—Authorizing the municipality of Ratter and Dunnet to construct a public crossing over C.P.R. at 9th line between lots 8 and 9, sixth concession, Dunnet tp., Ont.

4340. Feb. 12.—Extending until May 1, 1908, time within which Canadian Northern Ontario Ry. shall instal interlocking and derailing appliances at crossing of C.P.R., Cleland tp., Ont.

4341. Jan. 31.—Authorizing C.N.R. to use for construction purposes only the crossing of its track with the C.P.R. near Lachevrotiere, Que., until May 1, 1908.

4342. Feb. 12.—Authorizing G.T.R. to construct spur to J. Duff and Son's premises, Hamilton, Ont.

4343-4344. Feb. 12.—Authorizing East Middlesex Telephone Co-operative Association to carry its wires over G.T.R. tracks at Kelly's siding, and Wyton, Ont.

4345. Feb. 7.—Extending until May 1, 1908, time within which G.T.R. shall instal gates and interlocking semaphores on its tracks where they cross the Montreal St. Ry. at junction of St. Ferdinand and Notre Dame streets, St. Henri, Montreal.

4346. Feb. 13.—Authorizing C.P.R. to construct spur to the Inter-Ocean Pressed Brick Co.'s premises, Pilot Butte, Sask.

4347 and 4348. Feb. 14.—Authorizing C.P.R. to construct ferry aprons for use in connection with ferry slips at Vancouver, B.C., and Prescott, Ont.

4349. Feb. 14.—Authorizing Bryon Telephone Co. to carry its wires across G.T.R. tracks west of Komoka, Ont.

4350 Jan. 21.—Approving C.P.R. spur line, known as the branch line north of Edmonton, Alta., through secs. 14, 15, 16, 17 and 18, township 53, north, range 24, west of 4th meridian, Alberta, commencing at the centre line of the G.T. Pacific Ry. main line, in the n.w. ¼ of sec. 14, township 53, north, range 24, west of 4th meridian.

4351. Feb. 12.—Authorizing C.P.R. to construct spur to Oliver & Manson's premises, Winnipeg.

4352. Feb. 17.—Authorizing the County of Victoria to lay sewer pipes under G.T.R. tracks at Albert St., Lindsay, Ont.

4353. Feb. 3.—Directing the C.P.R. to construct, maintain and operate a spur line to the Northwest Jobbing and Commission Co.'s warehouse, Lethbridge, Alta.

4354. Feb. 17.—Authorizing Bell Telephone Co. to erect aerial wires across Pere Marquette Ry., 2¾ miles north of St. Thomas station, Ont.

4355. Jan. 15.—Directing Windsor, Essex and Lake Shore Rapid Ry. to provide and place upon its poles on Talbot St., Essex, Ont., standard copper conductors to enable C. E. Naylor, of Essex, to transmit electric energy across the railway tracks at eight different points in Essex.

4356. Feb. 18.—Authorizing C.P.R. to construct its railway across certain highways in Albion tp., Ontario.

4357. Feb. 18.—Authorizing Edmonton, Yukon and Pacific Ry. to open for the carriage of traffic the portion of its line from Edmonton to Strathcona, Alta.

4358. Feb. 18.—Authorizing town of Aylmer, Ont., to lay a water main under G.T.R. tracks.

4359. Feb. 19.—Approving specifications and plan of trestles proposed to be used by British Yukon Ry. in construction of its Whitehorse extension.

4360. Feb. 19.—Authorizing Dr. E. T. Williams to erect telephone wire across G.T.R. tracks a mile north of Sunderland, Ont.

4361. Feb. 19.—Authorizing Bell Telephone Co. to erect its wires over G.T.R. at foot of Peter St., Toronto.

4362. Feb. 19.—Certifying corrections made in location of Montreal, Quebec & Southern Ry., in the Gentilly and St. Pierre les Becquets parishes, Que.

4363. Feb. 18. — Approving Canadian Northern Ry. standard passenger tariff providing for standard passenger fare of 3c. per mile between its stations in Canada east of and including Edmonton, Alta., and rescinding order of Feb. 5, 1908.

4364. Feb. 19.—Authorizing Burnt River Telephone Co. to erect its wires across G.T.R. tracks at Somerville tp.

4365. Feb. 20.—Approving location of Walkerton and Lucknow Ry. between mileage 36.44 and 37.5 near Walkerton, Ont.

4366. Feb. 20.—Authorizing Bell Telephone Co. to erect its wires across G.T.R. at Grasshill, Ont.

4367. Feb. 20.—Authorizing Mond Nickel Co. to erect its transmission line across the C.P.R. Sault Ste. Marie branch near Victoria Mines, Ont.

4368. Feb. 19.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to cross with its track the Michigan Central Rd. track at Erie Ave., Leamington, Ont.

4369. Feb. 14.—Authorizing C.P.R. to construct a spur to E. A. Holstein's premises, Winnipeg, Man.

Steam Railway Statistics.

The statistical report of the Department of Railways and Canals respecting Canadian railways for the year ended June 30, 1907, prepared by J. L. Payne, Comptroller of Statistics, differs in many respects from that of previous years. The schedules sent out to the various railways for statistical purposes, and upon which the tables appended to the report are based, were much more elaborate than those which have been in use in the Dominion during the past 30 years. In all essential regards, they are identical with the forms which have been adopted by the U.S. Interstate Commerce Commission. It is claimed that the old schedules had become unsuited to modern railway conditions; that they failed to elicit many points of useful information; and that they did not, except in a limited way, permit of helpful comparisons with the railway statistics of other countries. The introduction of the new schedules involved, among other things, a uniform system of accounting on the part of railways. This, in itself, was a change urgently needed. It was not to be expected, however, that these changes could be readily and smoothly applied. Difficulties had to be met in many directions, but the mutual value of the new work, as between the Department and the railways themselves, was heartily recognized. This brought about a commendable spirit of co-operation. Therefore, while the returns are not as perfect as they doubtless will be in future years, they are nevertheless reasonably satisfactory under the circumstances. Only one company, the Kettle River Valley Ry., having less than five miles of line in operation in British Columbia, failed to make any return.

Mileage.—The total mileage of railways in operation June 30, 1907, was 22,452, against 21,353 at June 30, 1906, an increase of 1,099 miles. The mileage of double track lines was increased during the year from 743 to 1,067 miles. Adding the mileage of second tracks, sidings and yards to the 22,452 miles, the total of all tracks in the Dominion is 27,611 miles, of which all but 95 miles are laid with steel rails. The number of miles actually under construction was not reported for the year as formerly, but from data gathered by the Department it is estimated at 3,000. This does not include projected lines which have not reached the contract stage. Divided by provinces the railway mileage is: Ontario, 7,637.91; Quebec, 3,515,90; Manitoba, 3,074.46; Saskatchewan, 2,024.86; British Columbia, 1,685.29; New Brunswick, 1,502.73; Nova Scotia, 1,329.47; Alberta, 1,323.02; Prince Edward Island, 267.50; Yukon, 90.60. Estimating the population at 6,500,000, this gives one mile of railway to each 289 persons, and dividing the area of the Dominion by the railway mileage there

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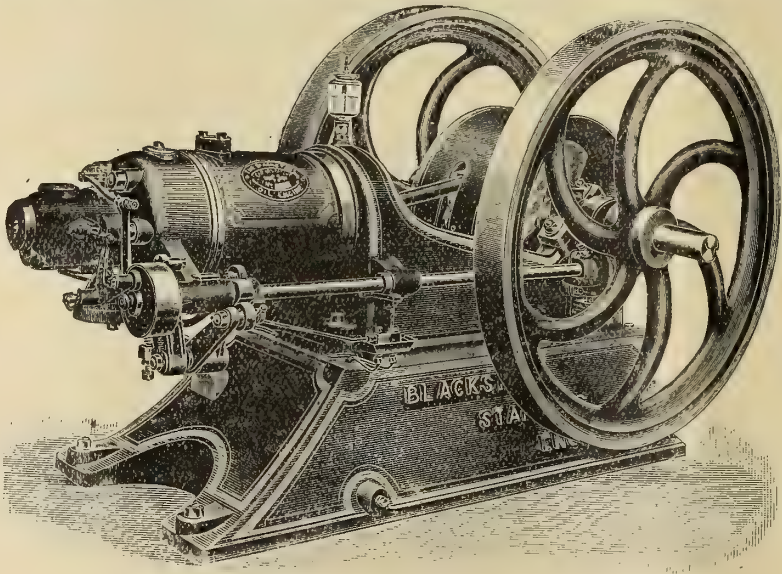

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are 161.80 square miles to each mile of railway. The table showing the mileage contains the names of 98 different railways, three of which are under construction, viz.: Atlantic, Quebec and Western Ry.; Grand Trunk Pacific Ry., and Quebec Bridge and Ry. Co., and in regard to which no mileage is given. The information given is tabulated under 35 different heads, and the totals of the various columns, under the four general heads, are:

Single Track.—Line represented by capital stock: Main line, 13,698.94 miles; branches and spurs, 3,671.50; lines of proprietary companies, 992.20 miles; line operated under lease, 3,909.00; line operated under contract, 180.10 miles; line operated under trackage rights, 156.77; total mileage operated, 22,608.51; new line constructed during year, 989.95 miles; line laid with iron rails, 10.54 miles; line laid with steel rails, 22,441.20 miles.

Second Track.—Line represented by capital stock: Main line, 1,005.82 miles; branch line and spurs, 16.80 miles; line operated under lease, 44.80 miles; line operated under trackage rights, 28.96 miles; total mileage operated, 1,096.38 miles; new line constructed during the year, 173.51 miles; laid with steel rails, 1,067.42 miles.

Yard Track and Sidings.—Line represented by capital stock: Main line, 3,885.63 miles; branches and spurs, 144.48 miles; line operated under lease, 58.73 miles; line operated under contract, 3.08 miles; total mileage operated, 4,091.91; new line constructed during the year, 131.89 miles; laid with iron rails, 84.12; laid with steel rails, 4,007.79 miles.

Total Mileage Operated, all Tracks.—Line represented by capital stock: Main line, 18,590.38 miles; branches and spurs, 3,832.78 miles; line of proprietary companies, 992.20 miles; line operated under lease, 4,012.53 miles; line operated under contract, 183.18 miles; line operated under trackage rights, 185.73 miles; total mileage operated, 27,796.80 miles; new line constructed during the year, 1,278.43 miles; laid with iron rails, 94.68 miles; laid with steel rails, 27,516.39.

Earnings and Operating Expenses.—The total earnings from operation for the year were $146,738,214.68, of which $95,738,079.21 came from freight service, $45,730,652.29 from passenger service, and $5,269,483.06 from other sources. This represented an increase of $21,415,349.65, or 17.09% over the earnings for 1905-06. The freight earnings, including $742,991.41 from stock yards, elevators, etc., were $1.472 per ton carried; and the average receipts per passenger carried were $1.423. The total earnings were equal to $6,535.64 per mile of railway; earnings per train mile, $1.953; average earnings per ton of freight hauled, $1.472; average earnings per passenger carried, $1.219. Of the operating railways, 68 gave information showing the average earnings per passenger per mile, and the average earnings per ton per mile, information never previously asked for. The average revenue per passenger was 2.863 cents; eight railways in British Columbia, having special charter rights, showed an average of 4.097 cents; four railways whose passenger revenue represents 71.11% of the total for the year return a rate of 2.070 cents. The average rate per ton per mile of the 68 reporting lines was 3.655 cents; leaving out nine railways having special rights, which average 12.352 cents; the 59 railways show an average of 2.328 cents; whilst the five principal railways which represent 73% of the total freight earnings show an average charge per ton per mile of 0.702 cents. The number of passengers carried one mile was 2,049,549,813, which would be the equivalent of an average journey per passenger of 64 miles. The number of tons of freight hauled one mile was 11,687,711,830, representing an average haul of 183 miles.

The operating expenses were $103,748,672.27, an increase over 1905-06 of $16,619,242.78, or 19.07%. The proportion of operating expenses to earnings was 70.7%. The operating expenses were equal to $4,620.90 per mile of railway; and to $1.381 per train mile.

The net earnings for the year were $42,989,537.41, against $38,193,430.54 for 1905-06. In volume this represents an increase of $4,796,106.87, or a betterment of 12.55%; but relatively the net result was 1.2% lower than for 1906, the difference being as between 29.3 and 30.5% of the gross revenue.

Traffic Statistics.—The traffic for the year showed an increase of 4,147,537 passengers carried and of 5,899,422 tons of freight carried, as compared with 1905-06, the figures for the two years being: Passengers, 32,137,319, against 27,989,782; freight, 63,866,135 tons, against 57,966,713 tons. Of the freight traffic 42,381,731 tons originated in the reporting roads and 13,848,240 tons were received from connecting lines. The freight carried was mainly classified under the following general heads: Products of mines, 18,460,172 tons; products of forests, 10,229,635 tons; products of agriculture, 9,521,661 tons; manufactures, 7,874,641 tons; products of animals, 2,469,266 tons; merchandise, 2,309,084 tons. The principal commodities carried were: Bituminous coal, 11,805,060 tons; lumber, 7,542,475 tons; grain, 5,776,731 tons; ores, 2,209,860 tons; stone, sand, etc., 2,083,336 tons; anthracite coal, 1,635,628 tons; flour, 1,402,386 tons; cement, brick and lime, 1,393,792 tons; live stock, 1,118,141 tons.

The total train mileage was 75,115,765, an increase of 2,392,283 miles over 1905-06. The increase applied almost wholly to passenger service. There was an actual reduction of 221,278 miles in the mileage of freight trains, notwithstanding the fact that 5,899,422 additional tons of freight were handled.

Accidents.—The record of accidents has been gathered with a greater regard to details than heretofore, so that a comprehensive analysis may now be made. The general result is as follows:

	Killed	Injured.
Passengers	70	352
Employes	249	1,126
Trespassers	195	125
Non-trespassers	70	88
Postal clerks, etc	3	7
Total	587	1,698

This represents the greatest number of people, both killed and injured, in the history of Canadian railways; yet with respect to passengers killed there have been two worse years—1889 and 1903—measuring the fatalities against the total number of persons carried. The comparative record with regard to persons injured was also exceeded in 1903. In addition, there was loss of life and injury to persons caused by railways, apart from the movement of trains. In preceding years this information was not gathered since it relates largely to shopmen and other employes not engaged in the actual work operation. It increases the toll, however, by 11 lives lost and 454 persons injured, and brings the total up to 598 persons killed and 2,152 injured. The following table shows the causes of the accidents:

	Passengers		Employes	
	Killed	Inj'd	Killed	Inj'd
Collisions	26	93	46	135
Coupling or uncoupling	..	..	34	141
Derailments	21	127	12	56
Falling from trains, etc.	2	36	32	186
Jumping on or off trains, etc.	10	38	7	66
Locomotives, etc., breaking down	..	..	1	6
Overhead structures	..	..	2	13
Parting of trains	..	3	2	16
Struck at highway crossing	4	7	..	..
Struck by trains	..	..	85	130
Struck at stations	4	3	..	..
Struck on track	..	1	..	..
Other causes	3	44	28	377

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

F. H. Hopkins & Co., railway contractors and mining suppliers, Montreal, have issued a large wall calendar with prominent figures.

The Baldwin Locomotive Works, Philadelphia, Pa., have issued record 64, an illustrated booklet describing locomotives built for the Central Rd. of Brazil.

The name of the Locomotive and Machine Co. of Montreal, Ltd., has been changed to Montreal Locomotive Works, Ltd., by supplementary letters patent issued by the Dominion Government.

Robt. W. Hunt & Co., Bureau of Inspection, Tests and Consultation, Chicago, Ill., have established their St. Louis, Mo., office, which is in charge of C. W. Gennet, Jr., at 1445 Syndicate Fruit Buildings. Their chemical and cement laboratory will be located in the same building.

The Dominion Wire Rope Co., Ltd., held its annual meeting in Montreal, Feb. 20, when the directors were unanimously re-elected. Following are the officers and directors for the current year: President, F. W. Fairman; Vice-President and Managing Director, F. H. Hopkins; other directors, G. P. Butters, Dr. C. W. Colby, E. E. Fairman; Secretary-Treasurer, J. J. Rosevear.

The Safety Car Heating and Lighting Co. of New York, which, as mentioned in our rolling stock notes, has recently completed the installation of 8,000 of its latest single mantle lamps on C.P.R. passenger cars, reports that it has sold inverted mantle lamps for over 3,000 cars during the past two years, and that the Prussian State railways are now changing their equipment on 30,000 cars to use the incandescent mantle in connection with Pintsch gas.

Rhodes, Curry & Co., Amherst, N.S., have asked the Moncton, N.B., City Council as to the inducements which might be offered them to locate a portion of their plant there. The proposal is made in connection with the letting of the old Intercolonial Ry. shops, for the occupancy of which the Department of Railways is asking tenders. Rhodes, Curry & Co.'s suggestion is to establish a steel foundry for the manufacture of railway appliances and steel castings generally, and the construction of passenger and electric cars. Should this suggestion be carried out the company's works at Amherst would, it is said, construct freight cars only.

◆

W. H. Aldridge, C.P.R. consulting mining engineer, is reported to have stated, Feb. 11, that the C.P.R. will probably commence producing coal from its Crow's Nest mineral lands in Jan., 1909. Development work is being carried on at Hosmer, on an extensive scale, and an up-to-date plant is being erected there. This is probably the work undertaken by the Hosmer Mines Ltd., a company of C.P.R. officials, recently incorporated.

A resolution has been submitted at the current session of the Alberta Legislature, asking the Dominion Government to amend the Railway Act in such manner that before prosecutions are begun against trainmen or other employes of railway companies for negligence causing accidents in the operation of trains or otherwise, provision be made for an investigation before some competent authority with a view of arriving at the cause of the accident.

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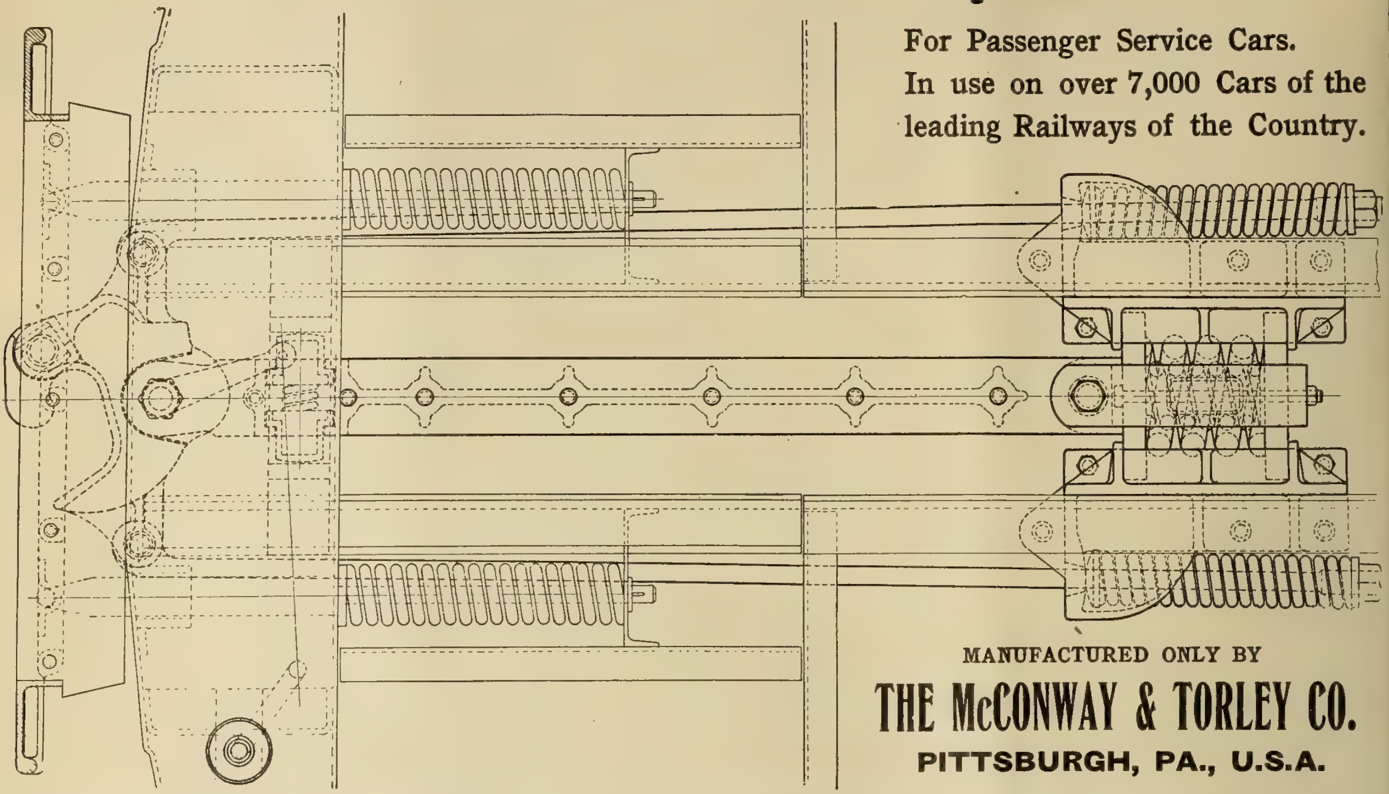

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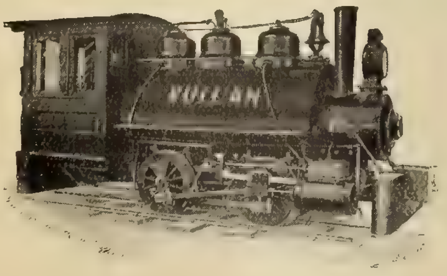

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RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta.—There was under discussion in the Alberta Legislature a resolution expressing the opinion that the Government should acquire the railways in the province running north and south, extend them to connect with the northern waterways, and construct a railway from the most northern portion of the province to connect with the waterways The resolution also called for the management of the railways, when constructed or acquired, by an independent commission.

An amendment was carried in favor of the extension of railway facilities to every part of the province, but having regard to the general interests of the province advocated the first use of its revenues and resources to the construction of roads, bridges, schools, etc.

Alberta North-Western Ry.—Application is being made by G. W. Büxenstein, H. Danziger, Berlin, Germany; O. E. Talbot, St. Michel, Que.; M. Cohn, H. B. McGiverin, Ottawa, at the current session of the Dominion Parliament, for an act incorporating a company with this title, for the purpose of constructing a railway from the Calgary and Edmonton Ry. between Olds and Innisfail, Alta., northwesterly along the valleys of the Red Deer, Raven and Clearwater rivers, to or near Rocky Mountain House on the North Saskatchewan River; thence westerly along the valley of that river to Kootenay plains in the Rocky Mountains; also from the North Saskatchewan River, between Bighorn and Sheep rivers, northwesterly to Brazeau River, thence northerly to and along the McLeod River to the G.T. Pacific Ry. The company asks for special powers enabling it to construct and operate steam and other vessels on the navigable waters touched by the railways; to carry on hotels; mining, lumbering and other businesses, and for power to enter into agreements with the C.P.R., the Calgary and Edmonton Ry., and the G.T. Pacific Ry. (Jan., pg. 19, and July, 1907, pg. 479).

The company is asking the Alberta Legislature at its current session for authority to construct a branch line from Medicine Hat to Nanton, and thence northerly to Keith; in addition to the lines previously authorized.

Algoma Central and Hudson's Bay Ry.—C. N. Smith, M.L.A., Sault Ste. Marie, in an interview Feb. 6, said the Ontario Government should construct and operate all new lines in Northern Ontario, in order the better to develop the resources and carry on the colonization of that part of the province. The Lake Superior Corporation, he said, was not at present in a position to carry the A. C. and H.B. Ry. to completion, and it would be in the interest of the Province for the Government to take over the line and finish it as a colonization work. In addition to the mileage of track laid and in operation, about 100 miles of grading had been done. The grading of an additional 25 miles would bring the line to a junction with the C.P.R. transcontinental line, and if it were still further extended to the G.T. Pacific Ry. it would draw some of the traffic off that line and help the Temiskaming and Northern Ontario Ry. to give Ontario the benefit of that traffic. It would, in his opinion, cost the Government about $25,000 a mile to acquire the existing line. The Provincial Minister of Public Works referring to this suggestion expressed the opinion that it would mean the adoption of a policy whereby the province would be responsible for running feeders to the great railway lines, which would get advantage of the long haul. On the other hand, if the Government owned the short feeder lines, the cost of operation of which would be proportionately higher than the main lines, it was probable that expenditures might be involved which would drain the revenue instead of assisting it. This opinion was expressed by the Minister as his own view, and not in any way official as representing the Government.

The Railway Age said recently:

> We are advised by T. J. Kennedy, Superintendent, Sault Ste. Marie, Ont., that definite decision has been reached relative to the proposed extension of this line.

We are officially advised that this is incorrect. It should have been stated that no decision had been reached.

The company at present has in operation the line from Sault Ste. Marie northerly, and the Michipicoten branch, together 89.64 miles, and has graded about 100 miles between the track end on the main line and the Michipicoten branch near Helen Mine. Upon this portion of the line there is one very large bridge to be completed.

Ashcroft, Barkerville and Fort George Ry.—The Dominion Parliament is being asked at its current session for an act extending for five years the time within which this company may construct its authorized railway. (Aug., 1906, pg. 449).

Boundary, Kamloops and Cariboo Central Ry.—An extension of two years for the commencement and of five years for the completion of this projected railway is being asked at the current session of the Dominion Parliament. (Nov., 1907, pg. 829).

Beersville Ry. Co.—See North Shore Rd. Co.

Bessemer and Barry's Bay Ry.—We are advised that surveys have been made for a branch line from Bessemer, Ont., to no. 1 mine, about 2.50 miles. During 1907 the company constructed a standard gauge track to its ore pocket and crusher, in place of the narrow gauge trestle upon which the ore was formerly carried to the main track. (Oct., 1907, pg. 741.)

Bruce Mines and Algoma Ry.—Press reports state that negotiations have been reopened between a British syndicate and the Ontario Government with a view of the completion of this railway from the present terminus near Rock Lake, to the C.P.R. Transcontinental Line near Chapleau, a distance of about 120 miles. (Jan., pg. 19, and June, 1905, pg. 241.)

Calgary and Fernie Ry.—The Dominion Parliament is being asked at its current session to grant an extension of two years for the commencement and of five years for the completion of this projected railway. (Nov., 1907, pg. 829).

Canada Central Ry.—The Ontario Legislature is being asked at its current session for an act extending the time within which this projected railway may be constructed. Ryckman, Kerr and MacInnes, Toronto, are solicitors for the applicants.

Canada West Coal Companies Rd.—

> "Announcement is made that this company, the head office of which is at St. Paul, Minn., will build a line to haul coke from Butte, Mont., north to the smelters at Calgary, Alb."—Railroad Gazette, New York.

Enquiries made in respect to this matter show that in September, 1907, a company with the title of the Canada West Coal and Coke Co. was granted supplementary letters patent under the Dominion Companies Act, under which its name was changed to the Canada West Coal Co. The Secretary of this company is F. E. Kenaston, of Minneapolis, Minn., and it has also an office at Winnipeg, Man. The company was reported to be carrying on mining operations at Taber, Alta. There are no smelters at Calgary, and we are advised by those in a position to know that there are none at any other point in Alberta

A director of the Canada West Coal Co. informs us that although the construction of a line to Calgary has been talked of by the company, nothing has been decided on. The same people, he says, who are interested in the C.W. Coal Co. at Taber, are also interested in large coal areas in the Livingstone Mountains, north of Frank, and notice of application for a railway charter was given in the autumn of 1907. Owing, however, to the financial depression, it was decided not to proceed with the application at the present session, and the whole matter dropped. The proposed name of this company was the Western of Canada Ry.

Cape Breton Ry.—We have been advised that the company has not made any definite steps in the direction of constructing an extension of its lines from St. Peter's to Louisburg, N.S. (Feb., pg. 97).

The Central Ontario Ry. has under construction an extension of its line from the present northern terminus at Maynooth, to Whitney, Ont., a distance of 25 miles. At Whitney connection will be made with the Ottawa Division of the G.T.R. (Canada Atlantic Ry.), and with the line constructed in 1902-03 by the St. Anthony Lumber Co., and extending to Big Opeongo Lake. (Jan., pg. 19).

Cumberland Ry. and Coal Co.—The amendment to its charter which the company is asking at the current session of the Dominion Parliament, authorized it to acquire the undertaking and property of the Spring Hill and Parrsboro Coal and Ry. Co., and to extend that railway to West Bay and to Oxford station so as to connect with the railway under construction between Oxford and Pugwash. It also authorized the company to make running arrangements with the Great American and European Short Line Ry. over the section of its railway between Oxford and Pugwash. This is a re-enactment of the powers for the construction of railways given the company in 1883. The railway statistics for the year ended June 30, 1907, shows that the company has in operation 32 miles of line, and in the report of the year ended June 30, 1906, the table showing the location of railways gives the following particulars: Spring Hill Junction, Intercolonial Ry. to Spring Hill Coal mines, N.S., and Parrsboro on the Bay of Fundy, 32 miles; Spring Hill and Oxford branch, 14 miles, from Spring Hill Mines to Oxford Village on the Oxford and New Glasgow branch, Intercolonial Ry., not in operation. This 14 miles of line covers part of the extension authorized by the act. The extension to West Bay has been under discussion at different times.

The Great American and European Short Line Ry., which is mentioned, was incorporated by the Dominion Parliament in 1882 (chap. 73), and it was voted a subsidy of $256,000 in the following year in respect of the construction of 80 miles of line between Canso and Louisburg. The name of the company was changed in 1884 to the Montreal and European Short Line Ry., and since then nothing has been heard of it. (Feb., 1907, pg. 87).

Detroit River Tunnel.—The work in progress at present is principally at the shore ends of the tunnel. The two sections of the tube sunk off the U.S. shore have been successfully connected and the concrete is being deposited round them. About 40 ft. of the tunnel approach has been driven at the U.S. side, and about 20 ft. has been completed at the Windsor end. Shield driving is in progress from both ends. Two more sections of the steel tubing have been completed, but they will not be sunk until early in March or April. (Oct., 1907, pg. 747).

Dominion Atlantic Ry.—A bill is before the House of Commons under which it is

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One ten-wheeled type with cylinders 18″ x 24″, standard gauge.
One consolidation type with cylinders 28″ x 32″, standard gauge.
Three consolidation type with cylinders 20″ x 24″, standard gauge.
One consolidation type with cylinders 19″ x 24″, standard gauge.

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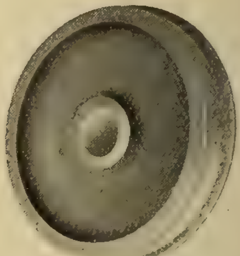

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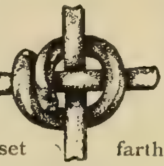

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sought to obtain power to construct a line from the old Cornwallis Valley Ry. between Kentville and Canning westerly to the company's railway between Berwick and Middleton, or some point between the main line and North Mountain. The line is to be known as the North Mountain Division; it is to be completed within five years, and bonds to the extent of £5,000 a mile may be issued to meet the cost of construction. (Feb., pg. 97).

Edmonton, Dunvegan and British Columbia Ry.—The Dominion Parliament is being asked at the current session to pass an act extending this company's powers so that it may construct and operate steam and other ferries in connection with its railways, or enter into agreements with the owners of such vessels for the hire of the same; construct and operate telegraph and telephone lines; acquire lands, water powers, for electricity; and engage in lumbering and mining. The time for the commencement of the projected railway to be extended for two years, and for their completion for seven years from the passing of the act.

The company was incorporated by the Dominion Parliament last session, the provisional directors being: J. B. MacDonald, Winnipeg; J. A. Sandgreen, Edmonton, Alta.; C. Pringle, Ottawa; T. G. Gallagher, Spokane, Wash. It was authorized to construct a railway from Edmonton, Alta., to Dunvegan, thence along the Peace River valley to the Parsnip River, and along that river to Fort George, B.C. (Dec., 1907, pg. 923; and April, 1907, pg. 243).

The Erie, London and Tillsonburg Ry. Co. is applying at the current session of the Dominion Parliament for an act authorizing an extension of time for the construction of its projected railway. (Dec., 1907, pg. 889, and Oct., 1906, pg. 583).

Fort William, Ont.—In connection with the application of the city corporation at the current session of the Ontario Legislature for authority to erect one or more bridges over the Kaministikwia River, the Dominion Marine Association has presented a strong protest to the Department of Public Works against the erection of more than one bridge to the islands in the river. The location of the proposed bridge is on the line of Arthur St. to Island no. 1. The Dominion Marine Association has already taken some steps to oppose the passing of this bill, and it is recommended that the Association should vigorously oppose unnecessary interference with navigation, especially upon the lower portion of the river. (Feb., pg. 97.) See also Fort William Terminal Ry. and Ferry Co.

The plans filed with the Department of Public Works indicate a bridge across the Kaministikwia River at Fort William, between the Ogilvie mills and elevator and Christina St., with a central pier and a free span of 100 ft. The Dominion Marine Association has presented a petition to the Department that the bridge to be erected be required to be of modern construction with no central pier, so as to make the least possible obstruction in the navigation of the river. (Feb., pg. 97.)

Fort William Terminal Ry. and Bridge Co.—A meeting of shareholders was held in Fort William, Ont., Feb. 10, for the purpose of the re-organization of the company. Following are the new officers and directors: President, J. L. Davidson, Fort William; Secretary, S. J. Rothwell, Winnipeg; Treasurer, C. H. Black, Winnipeg; other directors, J. W. Hobbs, H. H. Williams, Toronto. The President and Secretary were deputed to visit Toronto and make arrangements with a view of an early start at construction. (Feb., pg. 97).

Great Northern Ry. Lines in Canada.—Construction is being proceeded with on the extension of the Vancouver, Victoria and Eastern Ry. between Keremeos and Princeton, B.C., 44 miles. J. W. Stewart is the contractor, and J. H. Kennedy is Chief Engineer, the construction headquarters at present being at Keremeos. A press correspondent who recently went over the route said it was a matter of surprise how rapidly the grade is shaping up, and expressed confidence that April 1 would see more than 90% of the grading to Hedley ready for the steel, and the greater part of the track laid by the end of that month.

Grading has been resumed upon the section of the line from Cloverdale easterly to Abbots, B.C., A. Guthrie & Co., St. Paul, Minn., having taken over the contract from the British Columbia General Contract Co., which recently assigned. (Feb., pg. 97.)

Great Northern Ry., U.S.—The question of the construction of an extension of the line now terminating at Greenbush, to Warroad, Minn., on the Canadian Northern Ry. near the International boundary, is under consideration. (Nov., 1907, pg. 889).

Great West Ry.—Application will be made at the current session of the Dominion Parliament for an act amending the company's act of incorporation by substituting new names for the provisional directors mentioned therein; changing the head office from Nelson, B.C., to Port Arthur, Ont., and extending the time within which the authorized line of railway may be constructed. Chrysler, Bethune and Larmouth, Ottawa, are solicitors for the company. (Oct., 1907, pg. 741.)

Halifax and North-Eastern Ry.—H. S. Freeman, and G. S. Sherman, returned to Halifax, Feb. 3, having completed a survey of the route of this projected railway for the Nova Scotia Government. A report will be made to the Provincial Engineer, for consideration of the Legislature next session. (Nov., 1907, pg. 829, and May, 1907, pg. 323.)

Hudson Bay Pacific Ry.—A petition has been presented to the British Columbia Legislature at its current session for the incorporation of a company with the title of the Port Simpson and Eastern Ry., for the purpose of constructing a railway from Port Simpson, easterly to the provincial boundary. The petitioners are: W. H. Duval, J. Brandon, Victoria, B.C.; D. B. May, Washington, D.C.; W. H. Harding, New York. A report from Victoria states that the company does not ask for any land grant or cash subsidy from the Provincial or the Dominion Governments, and that the Board of Trustees includes the following: S. Shenstone (representing Rothschilds); E. B. Dean, Scranton, Pa.; Hon. Jas. McLaughlan, Los Angeles, Cal.; A. C. Latimer, Washington, D.C.; H. White, Seattle, Wash.; J. T. McCleary, Washington, D.C. (Feb., pg. 97.)

Intercolonial Ry.—The total length of double track line owned by the Dominion Government, and operated as the Intercolonial Ry., was on June 30, 1907, reported to be 16 miles. An additional mileage of second track is now under construction as follows: Between Moncton and Painsec Junction, N.B., 7.48 miles, J. B. McManus Co., Limited, Memramcook, N.B., contractors; and between Richmond and Kempt Road, N.S., The Willard Kitchen Co., Limited, Fredericton, N.B., contractors.

There are under survey the following extensions: From Red Pine station to iron mines in Gloucester county, N.B., about 10 miles; from Bathurst station to iron mines in Gloucester county, N.B., about 15 miles; and between Nelson and Chatham, N.B., about seven miles.

Replying to questions in the House of Commons, recently, the Premier said E. A. Wallberg was the contractor for the freight car repair shop at Moncton, the contract price being $56,630; he had been paid to Jan. 20, on account of the work, $54,547.34; there were no extras. The contract for the passenger car repair shop, passenger car paint shop, the store house and office building at Moncton had also been let to E. A. Wallberg, the contract price being $154,945; there had been paid Jan. 20, on account of the work, $147,736.08; there were no extras. Mr. Wallberg also had a contract for work above rail base and foundation walls in connection with the new engine house at Pictou, N.S., the contract price being $13,950; at schedule contract rates for foundation, retaining walls, filling cribwork, sewers, piling, etc, there had been paid $86,271.09, and altogether there had been paid to the contractor $100,221.99; the expenditure for labor and material by the Department of Railways outside of the contract had been $10,069.80; the final estimate on account of contract not yet paid was $10,719.71; site, $8,000; total cost of the works completed, $129,111.50.

The Premier in answer to a question in the House of Commons stated recently that the contract for the planing mill at the new shops at Moncton had been let to Rhodes, Curry & Co.; the contract price was $23,995; up to Jan. 20 there had been paid on account $23,007.96; there had been no extras.

The contract for the erection of the new engine house at Truro, the Minister of Railways recently stated in the House of Commons, had been completed, and the contractors, Rhodes, Curry & Co., Amherst, N.S., had been paid $162,774.63. In addition a water tank costing $4,470, and boilers, heating plant, etc., costing $24,425, were supplied by E. A. Wallberg, under contract; and a wiring contract for $844 was let to J. A. Dunn & Co. The total cost of the engine house and all equipment has been $240,871.56; of which $78,401.48 was for excavation and refilling. The Department's estimate for the whole of the work was $233,200. (Feb., pg. 97.)

Interprovincial Ry. Bridge Co. of New Brunswick.—Application is being made at the current session of the Dominion Parliament for an act extending the time within which the projected bridge over the Restigouche River, between the provinces of New Brunswick and Quebec, may be constructed. (Dec., 1907, pg. 889).

Iron Range Ry. and Development Co.—Application is being made at the current session of the Ontario Legislature for an Act incorporating a company with this title, with power to construct and operate a railway from Lake-of-the-Woods to Thunder Bay, in or near Fort William, Ont., and across Lake-of-the-Woods to the Manitoba boundary, together with branch lines to the C.P.R., and to the International boundary between Ontario and Minnesota, and to conduct the businesses of express, telegraph, telephone, power, light and heat, shipping dock, warehousing, etc., companies, and to enter into agreements with other railway companies. J. E. Swinburne, Fort William, Ont., is solicitor for the applicants.

Kamloops and Yellowhead Pass Ry.—Application is being made at the current session of the Dominion Parliament for an act extending the time within which the projected railway may be constructed. (Nov., 1907, pg. 829).

Lac Seul, Rat Portage and Keewatin Ry.—Application is being made at the current session of the Ontario Legislature, to extend the time for the commencement and completion of this railway and branches. The company was incorporated in 1903, with a capital of

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$100,000, and authorized to construct and operate a railway by steam or electricity from or near Lac Seul, via Rat Portage and Keewatin, to or near Shoal Lake, Rainy River district, and to construct branch lines, none of which are to exceed 12 miles in length. The company was also authorized to issue bonds to the extent of $20,000 a mile, and to erect telegraph and telephone lines along its route, and to enter into agreements or amalgamate with the C.P.R., G.T.R., C.N.R., Ontario Hudson's Bay and Western Ry., Algoma Central Ry., or any of them. The time specified for the commencement of the work was 1906, and for the completion, 1910. In 1904, an act was obtained amending the original act, authorizing the construction of the line from Rat Portage northwesterly, to intersect the G.T. Pacific route. C. W. Chadwick, A. M. Hay, A. H. Edmison, C. E. Neads, A. M. Rose, J. R. Bunn, and A. J. Parsons, are the provisional directors.

Macleod, Cardston and Montana Ry.—A bill before the Dominion Parliament at its current session provides for extending the time for the construction of this projected railway for five years. (Sept., 1907, pg. 663).

Matane and Gaspe Ry.—We are advised that arrangements are being made to put under contract 35 miles of this projected railway, the section to be constructed extending from St. Flavie, on the Intercolonial Ry., to Matane, Que. The company has also power to construct a line from St. Flavie to the National Transcontinental Ry., about 89 miles; and from Matane to Gaspe, about 190 miles, upon which lines some survey work has been done. (Sept., 1907, pg. 663.)

Napierville Junction Ry.—A loop line of 40 miles has been completed at St. Constant, Que., connecting the company's line from near Rouse's Point, N.Y., with the C.P.R. and the G.T.R., and a line of 0.35 mile has been completed at Lacolle, Que., giving connection with the G.T.R. (July, 1907, pg. 479).

New Brunswick Southern Ry.—A bill is under consideration at the current session of the Dominion Parliament to remove doubts, to declare the N.B.S.R. to be a work for the general advantage of Canada, and to confirm the powers and privileges conferred on the company by the N.B. Legislature, and by chap. 63 of the Dominion statutes of 1895. The company also asks authority to construct a bridge across the St. Croix River at or near St. Stephen or Milltown, with all the necessary approaches, for the purpose of connecting its railway with the Washington County Ry. in the State of Maine. Authority is asked to enter into such agreements as may be necessary with the Crown and certain companies, viz., the Maine Central Rd.; the G.T. Pacific Ry.; the G.T.R.; the C.P.R., and the Canadian Northern Ry., or any of them. (Nov., 1907, pg. 829, and Sept., 1907, pg. 665).

Newfoundland.—At a meeting held at Bonavista, Nfld., Jan. 31, a petition was signed asking the Government to construct a railway from Clarenville to Bonavista.

The Niagara Grand Island Bridge Co. is applying at the current session of the Dominion Parliament for an act extending for a further period the time for the construction of the projected bridge across the Niagara River. (Nov., 1907, pg. 831).

North Shore Rd.—At a meeting for the organization of this company, held recently at Moncton, N.B., the following were elected officers and directors: President, J. McKay, New York; Treasurer, I. Purdy, New York; other directors: J. M. Selley, Jas. Millbank, New York; Dr. M. F. Keith, Moncton; Secretary, W. G. Kennedy. The company was incorporated under the New Brunswick Companies Act to take over the Beersville Ry., a line of 8.63 miles, constructed and operated by the Beersville Coal and Ry. Co. Press reports state that the company has decided to carry out extensive improvements on the line. (See Beersville Coal and Ry. Co., Feb., 1907, pg. 87).

Ottawa, Brockville and St. Lawrence Ry.—An act authorizing a further extension of time for this projected railway is under consideration at the current session of the Dominion Parliament. (Dec., 1907, pg. 923).

Owen Sound and Meaford Ry.—The Dominion Parliament is being asked at its current session to pass an act authorizing a further extension of time for the construction of this projected railway between Owen Sound and Meaford, Ont. (Jan., pg. 21).

Oyster Bay, B.C.—Application is being made at the current session of the British Columbia Legislature for an act incorporating a company with power to construct a railway from sec. 14 or 15, range 5, or section 14, range 6, Cranberry District, to Oyster Bay, about 12 miles. Barnard and Robertson, Victoria, are solicitors for the applicants.

Prince Edward Island Ry.—The Premier in reply to a question in the House of Commons, Jan. 22, said the total cost of the Hillsborough River bridge to date had been $1,363,085.57, which included the substructure and the superstructure of the bridge, also the approaches and completion of roads and floor for highway purposes. There was a claim outstanding from M. J. Haney, the contractor for the substructure and approaches, amounting to $393,821.04, and from Hugh MacDonald, for work on the superstructure amounting to $16,081.39. Mr. Haney's claim had been submitted to arbitration, Collingwood Schreiber, Consulting Engineer to the Department, having been appointed sole arbitrator. (Feb., pg. 99).

In the course of a discussion in the House of Commons, Feb. 17, respecting a motion for papers as to the construction of branch lines in P.E.I., it was stated that the present Government had practically reconstructed the line, and had built 60 miles of new railways. The Minister of Railways said that since 1875 there had been expended upon construction, renewals and operating expenses $12,041,000. Since that year the railway had not come within $2,500,000 of paying operating expenses. In the past 11 years the Government had expended $3,550,000 in construction works on the line. The railway, it appeared, could not be made to pay, but notwithstanding that the transportation claims of the Island would be given due consideration by the Government. (Feb., pg. 99.)

Quebec Bridge and Ry. Co.—The Minister of Railways, in reply to a question recently asked in the House of Commons, said the quantity of material on hand, but not in construction, for the Quebec Bridge at the time of the accident was as follows in pounds weight:

Finished material in storage at Phœnixville, on land leased to the Dominion of Canada	14,755,399
Finished material in storage on land at or near Quebec	21,306,113
Raw material at Phœnixville	2,981,787
Total raw and finished material	39,043,299

This material consisted of structural steel; it was valued at $1,467,790.40; it belonged to the Quebec Bridge and Ry. Co.; no portion of this material had been shipped back to the U.S. or elsewhere by the contractors or others; this material was included in the materials and supplies paid for with money obtained under the guarantee of the Dominion Government, and no action has been taken by the Government in connection with such supplies and building material on hand pending the report of the Commission.

The Minister of Finance, replying to a question in the House of Commons Feb. 3, said the company's bonds had not been sold, but were guaranteed by the Dominion Government, and the money had been advanced by the Bank of Montreal at 5% interest. The amount due to the bank up to June 30, 1907, was $5,561,107. (Jan., pg. 21).

Upon motion of F. D. Monk, M.P., the House of Commons agreed Feb. 5 to a resolution directing the appointment of a committee of seven members to investigate the conditions and guarantee under which the Dominion Government paid money to the company, and guaranteed its bonds; and what security the Government possesses for the money received by and guarantees given to the company, and to enquire into plans of construction and the proper execution of the same.

Senator Landry called the attention of the Government in the Senate, Feb. 15, to the condition of the bridge, pointing out that the main pier was liable to be damaged if the fallen steel work was not cut away. If the company did not take steps to protect the pier, the Government should do something.

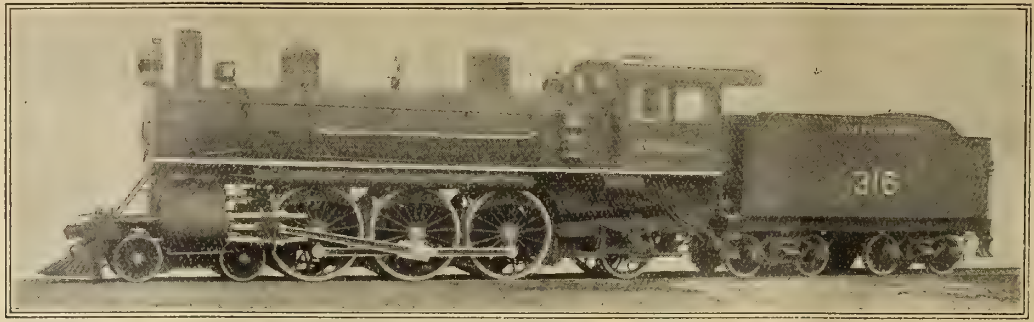
The Montreal Board of Trade has passed a resolution urging that when the bridge be reconstructed it be placed at an elevation of at least 190 ft. above high water mark, in order that in years to come the passage of the largest vessels to the navigable waters above Quebec may not be interfered with.

At a meeting of the directors in Quebec, Feb. 16, the question of the reconstruction of the bridge was under discussion. It was stated that the commission appointed by the Dominion Government to investigate the cause of the disaster and place the responsibility for the collapse of the bridge had nearly completed their labor, and expected to have their report ready very shortly thereafter, when it would be handed in to the Government prior to being placed before the House of Commons, and the subject of the reconstruction of the bridge discussed and decided upon, in order to have the work commenced as soon as possible, so that the bridge may be erected to handle the traffic of the G.T. Pacific Ry. upon its completion. (Jan., pg. 21.)

Quebec Central Ry.—Plans are reported to have been prepared for the extension of the St. George, Beauce, branch for a further distance of 12 miles. The extension will leave the valley of the Chaudiere River, and will follow the Famine River Valley, to St. Prospere, and probably to St. Rose, Dorchester County. (Feb., pg. 99.)

Quebec and Lake St. John Ry.—With the completion of the La Tuque branch, and the addition of 1½ miles to the Gosford branch to Clark's, the Q. and L. St. J. R. added 13½ miles to its length during 1907, bringing its total mileage up to 296½, divided as follows: Quebec to Roberval, 188 miles; Chambord Junction to Chicoutimi, 51 miles; La Tuque branch, 52 miles; Gosford branch, 5½ miles. A subsidy contract was entered into between the Dominion Government and the company in respect of the construction of railway for 35 miles from the company's line near River Jeannotte to La Tuque, on the St. Maurice River, Quebec. This contract covers the La Tuque branch, which has been opened for traffic. (Nov., 1907, pg. 831.)

Quebec, Montreal and Southern Ry.—The extension of the line from Pierreville to St. Philomene, Que., 44.50 miles, which has been under way for some time, is being proceeded with satisfactorily. Track has been laid from Pierreville to station 1220, a distance of four miles, and considerable grading has been done between that point and St. Philomene.



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O'Brien and Mullarkey, Montreal, are the contractors, and F. D. Anthony, Montreal, is Chief Engineer. (Jan., pg. 23).

Quebec and New Brunswick Ry.—At a general meeting of shareholders called to be held Feb. 12, a resolution was submitted authorizing the directors to sell from time to time as may be advisable the undertaking and other assets of the company; to adjust all claims against the company, and to pay the same so far as the assets will permit. (Jan., pg. 21).

Saskatoon, Saskatchewan, Peace River and Dawson Ry.—Application is being made at the current session of the Dominion Parliament for an act incorporating a company with this title for the purpose of constructing a railway from Saskatoon, Sask., to the Athabasca River, at or near Athabasca Landing, Alta.; thence northwesterly to Peace River Landing; thence to the Nelson River at or near Fort Nelson, B.C.; and thence to Dawson, Yukon, passing through or near the following principal points: Saskatoon, Langham, Athabasca Landing, Lesser Slave Lake settlement, Peace River Landing, Fort Nelson, Centreville and Dawson. The company asks powers as to telegraph and telephone lines, wharves, warehouses, vessels, hotels, the generation of electricity, etc. Authority is asked to make agreements with the G.T. Pacific Ry., the Canadian Northern Ry., the C.P.R., or the Klondike Mines Ry., and any other railway whose lines are to be crossed, approached or connected with. The provisional directors are: A. G. Hunter, W. Gilchrist, R. Credicott, W. B. Livett, Toronto; and J. W. Astley, Winnipeg (Dec., 1907, pg. 889), see also Klondike Mines Ry., Oct., 1907, pg. 747).

Sydney and Louisburg Ry.—The branch line under construction from Grand Lake Junction to Victoria Mines, N.S., will have a total length of seven miles. The Lindsay Construction Co., Liverpool, N.S., has the contract, and satisfactory progress is being made with the work. Surveys are being made for a line from Victoria mines to Luigan mines, a distance of 2½ miles. C. M. Odell is Resident Engineer in charge for the Dominion Coal Co. (Jan., pg. 23.)

Temiskaming and Northern Ontario Ry.—Referring to the statement in the statistics of the railways of Canada published by the Department of Railways for the year ended June 30, 1907, that the cost of the T. and N.O. Ry. was $76,047 a mile, Col. Matheson, Treasurer of the Province, is quoted as saying that the figure is "wrong, outrageous and rascally." The Comptroller of Statistics in reply says the figures upon which the amount was calculated were contained in the sworn statement supplied by the Chairman and Secretary of the Commission having charge of the construction and operation of the railway, in which the mileage of the railway was given as 138.9 miles, and the capital outlay to June 30, 1907, $10,570,549.51. The cost divided by the mileage gives the figure quoted.

The mileage given was the actual mileage being operated, while the capital expenditure included not only the cost of the 138.9 miles in operation, but the amount paid to June 30, on account of the additional mileage to the junction with the G.T. Pacific Ry., of which there has been put in operation 67 miles, making 205 in all; and of some miles of branch lines.

Track has been laid to milepost 208 from North Bay, a total distance during the year of 70 miles. There is under construction a further 43 miles upon the main line which will carry it to a junction with the National Transcontinental Ry. (Eastern Division G.T. Pacific Ry.), the contractors for which are McRae, Chandler and McNeil, Driftwood City, Ont. The branch lines under construction are: Cobalt to Kerr Lake, 4 miles; contractors, McQuigge and Hunt, Cobalt, Ont.; Englehart to Charlton, 8 miles, contractors, Canadian Construction Co., Montreal.

The question of the location of the spur from the main line to the steamboat wharf at Haileybury, is reported to be still undecided. The route recommended by the engineers is through the residential portion of the town, to which, however, the property owners object. The alternative route to the south would be more expensive to construct, and on account of a heavy gradient, would be an expensive piece of line to operate. Meanwhile, negotiations are proceeding with a view of arriving at a decision.

Toronto, Hamilton and Buffalo Ry.—A contract has been let for the construction of the spur to the Canadian Westinghouse Co.'s works, Hamilton, Ont., 1.26 miles. Emerson Goodale, Hamilton, is the contractor for the grading. (Mar., 1907, pg. 245).

Toronto Union Station.—A resolution has been under discussion by the Toronto Board of Control asking the Board of Railway Commissioners to direct that the construction of the proposed new Union Station at Toronto be commenced within six months after the viaduct question has been settled. (Aug., 1907, pg. 563.)

Vancouver Island and Eastern Ry.—Application is being made at the current session of the Dominion Parliament for an act incorporating a company with this title with the object of constructing a railway from Victoria, B.C., with a bridge across the Narrows to the mainland, and thence to Edmonton, Alta., by way of the Yellowhead Pass. The applicants for the charter include T. W. Patterson, railway contractor, Victoria, and M. J. Haney, railway and general contractor, Toronto. (Jan., pg. 23. See also Pacific and Eastern Ry., Aug., 1906, pg. 455.)

Western Ry. of Canada.—See Canada West Coal Companies Rd. (Nov., 1907, pg. 831).

White Pass and Yukon Ry.—Application is being made at the current session of the Dominion Parliament for an act authorizing the British Yukon Ry. Co. (the Canadian title of the W.P. and Y. R. Co.) to construct an extension of the existing line of railway from near milepost 106, south of Whitehorse, Yukon, northwesterly to the Tahkeena River, a distance of about 15 miles. The line is to be constructed within five years, and bonds or other securities not exceeding £6,000 a mile of the new line may be issued.

We are advised that the company purposes constructing this year a branch to open up the various copper mines in the neighborhood of White Horse, Yukon. This branch will leave the main line 103.5 miles north of Skaguay, and about 6.5 miles south of White Horse, and run northwesterly. Construction will be started about Mar. 15, or as soon as the weather permits, and it is hoped to complete the track in July. The mileage to be constructed during the year is, main line, 12.50 miles; spurs and sidings, 3.80 miles; total, 16.30 miles. Though the route lies through very rough country, there are no extraordinary difficulties to overcome. On the main line, the total curvature is 2,429° 03′, equalling 5.27 miles; total tangent, 7 23 miles; average curvature per mile 194° 18′, curvature percentage 42, maximum curvature 18°, maximum gradient 2.25%, difference in elevation between terminals 265.7 ft., total rise 507.2 ft. (Feb., pg. 101).

Winnipeg City Power Plant.—Track has been laid on the railway under construction in connection with this project, from Lac du Bonnet, Man., to the crossing of the Winnipeg River, about 2.50 miles. A wooden trestle bridge, consisting of 12 spans of 80 ft. each, on concrete piers, is being constructed across the river. Grading from the crossing of the river to Point du Bois, about 21.50 miles, has been practically completed, and when the trestle bridge is finished tracklaying will be resumed. W. Newman, Winnipeg, is the contractor for the grading and bridge construction, the city doing the tracklaying and ballasting by day labor. (Jan., pg. 23.)

Canadian Northern Ry. Construction.

Canadian Northern Quebec Ry.—Application is being made at the current session of the Dominion Parliament for an act authorizing the construction of a line from near St. Jerome to St. Eustache, Que., and authorizing the company to construct or otherwise acquire a line from or near Ottawa, via Hawkesbury to Montreal, branching on Montreal Island to enter Montreal from both the northeast and the southwest.

Considerable progress has been made with construction on the cut-off from Garneau to Quebec. On the western division track has been laid from Garneau to the Batiscan River, and from Lachevrotiere west to the St. Ann River, 18.14 miles. The material for the superstructure of the bridge across the St. Ann River is being delivered. This bridge consists of four 90 ft. deck-plate girders. On the eastern division, 2.5 miles of track has been laid from Lachevrotiere easterly, and considerable grading done. The grading on the loop at Quebec has been completed.

The St. Jerome-Montford branch which connects the main line with the old Montford and Gatineau Colonization Ry., which was opened for traffic in Sept., 1907, is 15.2 miles long. The stations and freight sheds at St. Jerome and Shaw Bridge have been completed. Bridges have been completed at all points except at the first crossing of the North River.

Canadian Northern Ontario Ry.—During 1907, the grading of 50 miles upon the company's line from Hawkesbury, Ont., to which point the Canadian Northern Quebec Ry. extends, was practically completed.

The line formerly known as the James Bay Ry., forms the section of the C.N.O.R., extending from Toronto to Sudbury. Upon this section track was laid during 1907, upon 99.8 miles northerly from Sudbury, and branch lines were completed bringing the total mileage laid during the year to 138.03. Adding to this the 149 miles being operated between Toronto and Parry Sound, gives this portion of the company's lines a total mileage of 287.03. Upon the portion of the line between Toronto and Parry Sound, considerable work has been done towards double-tracking the portion of the old Belt Line at Toronto, which has been taken in ; a steel bridge has been erected at Gamebridge, and track has been laid to the new docks constructed at Lake Joseph and Bala, in the Muskoka Lakes country. On the line north of Parry Sound the following bridges have been erected: A 40 ft. deck-plate girder at Shawanagan; a 142 ft. deck-plate girder at South Magnetawan; an 80 ft., two 60 ft., and two 40 ft. deck-plate girders at Still River; a 70 ft. deck-plate girder at Elbow River; a 100 ft. deck-plate girder at Wanapeti; and a 70 ft. deck-plate girder at the first crossing of the Vermillion River. The material for the construction of a 300 ft. span across the Pickerel River, and for the bridge across the French River, was either on the ground or in course of delivery, and construction is being proceeded with. This latter bridge will consist of one span of 128 ft., and two spans of 120 ft. each, deck-plate girders. Three combined stations and section houses, and five tanks have been erected. Poles for the tele-

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phone line between Parry Sound and Key Harbor have been put up, and a wire for a temporary telephone service strung.

The work done in connection with the construction of the Key Harbor branch and docks was fully described in our Jan. issue.

Nearly all the grading has been done on the Hutton branch, and 6.8 miles of track laid, in addition to considerable ballasting. Two tanks have been erected, and the telegraph line has recently been completed. At the iron mine the necessary sidings have been put in and by connecting the high and low levels a Y has been formed. The Garson branch extends from the Hutton branch to the Mond nickel mine, and has a length of 3.08 miles. Track has been laid to the mine and some ballasting done. A freight service is being given over the branch, the traffic being turned over to the C.P.R. at Sudbury. A telegraph and telephone line is being constructed.

The Canadian Northern Systems Terminals, which was incorporated under the Dominion Companies Act, has been granted a license to do business in Ontario, G. F. Macdonnell, Toronto, being appointed its attorney.

Application is being made at the current session of the Dominion Parliament for an act authorizing the company to construct a line from some point on its line between Udney and Rathburn to the Georgian Bay.

Canadian Northern Ry.—Track was laid during 1907 upon 267.34 miles of new line, as follows: Atikokan spur, 3.31 miles; Oakland extension, 17.14 miles; Virden, main line to station, 0.63 mile; Rossburn towards Russell, 13.64 miles; Cardinal to De Lourdes, 1.24 miles; Brandon to Regina, 219.9 miles; Etiomami towards Pas Mission, 11.48 miles.

Surveys are in progress or grading contracts have been let as follows: Oak Point, Man., northerly 15 miles; completion of Rossburn to Russell line, 25 miles; Dalmeny northerly, 28 miles; Saskatoon to Goose Lake, 58 miles; and Edmonton westerly. Upon the Qu'Appelle, Long Lake and Saskatchewan Ry., a revision of about 8.4 miles, between Lumsden and Disley, Sask., was under contract.

Application is being made at the current session of the Dominion Parliament for an act authorizing the construction of the following additional branch lines: From Humbolt southwesterly to tp. 27, range 7, west 3rd meridian, then westerly to Calgary, Alta.; from the Brandon-Regina line westerly to Lethbridge, Alta.; from near North Battleford, Sask., to Athabasca Landing, with a branch to Green Lake, near the Beaver River; from Strathcona southerly to Calgary, Alta.; from Regina southwesterly to the International boundary; from near Edmonton to the headquarters of the MacLeod and Brazeau rivers, or to the head of one of these rivers with a branch to the other; from near Russell, Man., westerly via Yorkton, to near Goose Lake, Sask.; from a point south of Neepawa, Man., northwesterly to the main line crossing of the South Saskatchewan River. The bill also provides for an extension of time for the construction of the following branch lines: From 10 miles north of the company's line between Winnipeg and Ste. Anne, Man., southerly to the Manitoba boundary; from between Port Arthur and Fort Frances, Ont., northeasterly and southeasterly to Quebec, and from points on the line hereby authorized to points in or near Port Arthur, Ottawa and Montreal; from west of Battleford westerly to the Brazeau River; from near Regina to Humbolt, via the Carrot River valley to the Pas Mission, and from between Humbolt and the South Saskatchewan River at the crossing of the South Saskatchewan River by the C.P.R. Prince Albert branch.

Edmonton, Yukon and Pacific Ry.—The Dominion Parliament is being asked at its current session for an act authorizing the company to construct a branch from its authorized line by the most feasible route to Vancouver, B.C., and a branch to the headwaters of the MacLeod and Brazeau rivers. An extension of time is also being asked for the construction of the line authorized in 1899, from its projected line either to the Yellowhead Pass or the Peace River Pass, and thence to a port in British Columbia, or to connect with the line which the British Pacific Ry. is authorized to construct. Another section gives the company power to issue bonds to the extent of $35,000 a mile, instead of $25,000 a mile as previously authorized.

Winnipeg Joint Terminals.—The new joint station at Winnipeg for the Canadian Northern Ry. and the National Transcontinental Ry. will be built on the east side of Main St., the west front facing Broadway, looking towards the Parliament buildings. The portion of Broadway east of Main St. will be closed and used for railway purposes, a new street being opened further north from Main St. to the Broadway bridge over the Red River. The new station will be a through one. All the passenger tracks will be elevated, so as to avoid crossing any streets at grade. It is probable that a bridge will be built over the Red River at the foot of Lombard St., to give the National Transcontinental Ry. entrance from the east, and that this bridge will also be used by the Canadian Northern Ry. The latter company's present bridge over the Red River will be used for freight traffic. Another bridge for passenger traffic will be built over the Assiniboine River nearer Main St. than the present one, which will then be used for freight traffic.

Increasing the Railway Commission.

The Minister of Railways has given notice of the introduction of a bill in the Commons to increase the Railway Commission by the appointment of an Assistant Chief Commissioner at $9,000 a year, and of two additional Commissioners, at $8,000 a year. The new Board will therefore, consist of six Commissioners, the Chief Commissioner receiving $10,000, the Assistant Chief Commissioner $9,000, and four other Commissioners $8,000 each.

The Toronto Globe's Ottawa correspondent gives the following particulars, which may be regarded as semi-official: "The enlargement of the personnel of the Commission will enable the Commissioners to more adequately and expeditiously handle the rapidly growing mass of work now coming before them. With six Commissioners several applications an be heard simultaneously in various parts of the country, if need be, two Commissioners being enabled to hear and decide upon a case. In fact, under the present law one Commissioner has authority to hear a case, and this will also be allowable in the new Board. Where the cases are of considerable general importance, however, the whole Board, or else a majority of the Board, will hear the evidence. The Commission, as in the case of the U.S. Interstate Commerce Commission, will have a pretty free hand in deciding, at its own discretion, what Commissioners shall deal with individual cases, etc.; the general plan of having all decisions and evidence referable to the whole Board for consideration, as at present, being unchanged.

"A further Government bill to amend the Railway Act will be introduced, placing telephone and telegraph companies under the jurisdiction of the Railway Commission. The powers now conferred on the Commission with respect to the control of railways will be analogously applied in the case of all telephones and telegraph companies, i.e., the Commission will have full control with regard to tolls, operating rules, etc.

"It is also understood that the bill will include an amendment to the Railway Act, practically giving effect to the desire of shippers that a reciprocal demurrage clause should be inserted in the act. The exact wording of the clause is not yet determined upon, but it is probable that the Railway Commission will be empowered to make regulations and enforce penalties against railway companies analogous to the demurrage regulations now enforced by the railway companies against shippers. The Commission will have discretion in the matter, and will be able to do justice both to the railway companies and to the shippers."

Recent Dominion Legislation.

Among the acts to receive the royal assent, Feb. 12, at the current session of the Dominion Parliament, were the following affecting transportation interests:

British Columbia Southern Ry.—Extending the time for the construction of the authorized lines.

Campbellford, Lake Ontario and Western Ry.—Extending the time for the construction of the authorized lines.

Esquimalt and Nanaimo Ry.—Extending the time for the construction of the authorized lines.

Manitoba and Northwestern Ry.—Extending the time, for the construction of the authorized lines.

West Ontario Pacific Ry.—Extending the time for the construction of the authorized lines.

Economics of Railway Operation.

This is the title of a volume of 666 pages with an index, by M. L. Byers, Chief Engineer Maintenance of Way, Missouri Pacific Ry., and published by the Engineering News Publishing Co., of New York. It undertakes to describe in detail the operative systems of American railways; it covers every department of operating work, but does not enter very exhaustively into the engineering field. The object of the author is to so outline the operations of each department as to give to those not familiar with its working a sufficient insight to enable them to acquire further detailed information through their own observation; and to bring into clear relief the underlying principles of economic operation with a view to the practical usefulness of the information given to the employe in securing better results in that portion of the field under his direction. The work is divided into seven parts: Organization, employment, education and discipline of forces; accounts and accounting; reports; economic operation; analytical; betterments. The treatment of each of these divisions of the subject is clear and concise, and the diagrams and other illustrative forms given, cover thoroughly every detail of railway organization and operation. The information given is such as is applicable not only to the larger railway systems, but to those having only 1,000 miles or less of line. The price of the volume is $5 net.

A. K. McDougall, Canadian Ex. Co.'s agent at Bowmanville, Ont., died there, Feb. 20, aged 47.

In the article "Trent Valley Canal Contracts," on page 221 of this issue, it is stated that the contract for sec. 2 has been awarded to Weddell, Rogers & Dennon. Since that page went to press we have been advised that Mr. Weddell is not one of the contractors, and that the contract has been awarded to Rogers & Dennon.

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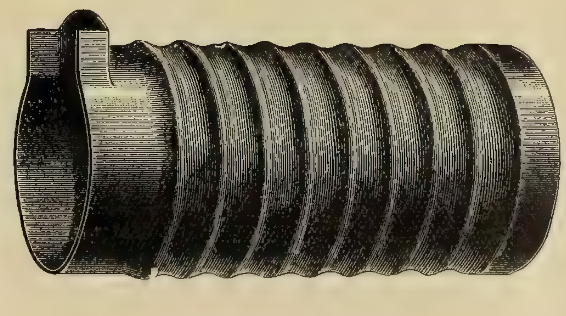

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MAINLY ABOUT PEOPLE.

C. McQuigge, railway contractor, Kenora, Ont., was married to Miss G. M. Perry at Winnipeg, Jan. 21.

J. D. Fraser, Secretary-Treasurer, Ottawa Electric Ry. Co., sailed from New York Feb. 15, for a Mediterranean trip.

G. W. Coward, of the G.T. Pacific Ry. engineering staff at Savanne, Ont., has sailed for Great Britain on a holiday trip.

Jas. Cottock, who died at Detroit, Mich., Jan. 30, was one of the contractors engaged on the construction of the old Great Western Ry.

Geo. Milden, who died at Cornwall, Ont., Feb. 6, was father of Jas. Milden, C.E., who is engaged on the Transcontinental Ry. survey.

F. W. Morse, Vice-President and General Manager G.T. Pacific Ry., has been elected a director of the Montreal Trust and Deposit Co.

H. R. Charlton, Advertising Agent G.T.R., left Montreal, Jan. 30, for England, in connection with exhibition advertising and other business.

F. Anders, cashier of the Temiskaming and Northern Ontario Ry. at Cobalt, Ont., committed suicide by shooting in the station office, Feb. 15.

F. H. McGuigan, formerly Fourth Vice-President G.T.R., has become interested in the Porto Rican Ry., and recently went on a visit to the island.

Hayter Reed, Manager-in-Chief C.P.R. hotels, lectured on the Battles on the Plains of Abraham, at Trinity Church schoolroom, St. Denis, Que., Feb. 17.

E. S. Piper, President of the N. L. Piper Railway Supply Co., Toronto, has been re-elected a director of the Holmes Electric Protection Co., Toronto.

W. Mackenzie, President Canadian Northern Ry., has been elected a member of the finance committee of the new buildings for Toronto General Hospital.

Elmore Cline, who died at East Toronto, Feb. 17, aged 74, was one of the promoters of the St. Thomas Street Ry. and was its manager for a number of years.

D. Marpole, son of R. Marpole, General Executive Assistant C.P.R., Vancouver, was burned to death by a fire at his residence, Spence's Bridge, B.C., Jan. 29.

John Brown, C.P.R. city ticket agent, Stratford, Ont., has resigned the Secretaryship of the Stratford Agricultural Society, which he held for the past 24 years.

W. H. Chandler, of McRae, Chandler & McNeill, contractors Temiskaming and Northern Ontario Ry., has gone to Nassau and the Bahamas with Mrs. Chandler.

Grieve Macrone, a member of the G.T. Pacific Ry. engineering staff at Kitimaat, B.C., who shot himself there recently, was at one time located at Savanne, Ont.

Lieut.-Col. Sir P. Girouard has returned to Great Britain, on leave of absence for nine months, from his position as High Commissioner of Northern Nigeria, Africa.

D. B. Hanna, Third Vice-President C.N.R., has been spending considerable time in Chicago recently, as one of the receivers of the Chicago and Milwaukee Electric Ry.

W. Wainwright, Fourth Vice-President G.T.R., was in Toronto, Feb. 20, on his way to British Columbia, in connection with matters relating to the G.T. Pacific Ry.

The marriage of Miss Peterson, daughter of P. A. Peterson, Chief Engineer Guelph and Goderich Ry., to Dr. D. Hingston, Montreal, is announced to take place, Mar. 3.

Dr. Pringle, C.P.R. doctor at Schrieber, Ont., was found dead in his bed there, Feb. 19. He was about 50 years of age, and had been a resident of the district for over 20 years.

C. M. Hays, Second Vice-President and General Manager G.T.R., sailed from New York, Feb. 16, for England, to confer with the directors upon G.T.R. and G.T Pacific Ry. matters.

Dr. H. T. Bovey, Dean of the Faculty of Applied Science at McGill University, Montreal, has been appointed Rector of the Imperial College of Science and Technology, London, Eng.

R. Hobson, Vice-President Hamilton Steel and Iron Co., left early in Feb. for the Mediterranean, accompanied by Mrs. Hobson and Miss White, of Toronto. They expect to return early in May.

H. A. Woods, Assistant Chief Engineer, G.T. Pacific Ry., Montreal, spent the greater part of Feb. making an inspection of the Lake Superior branch, and portions of the main line in Ontario and Manitoba.

M. J. Haney, C.E., has been re-elected a member of the executive committee of the Toronto General Hospital Trustees for the current year, and a member of the finance and building committees of the new hospital.

Mr. Justice Burbidge of the Exchequer Court of Canada died at Ottawa, Feb. 18, after an illness of several weeks. The court among other things exercises jurisdiction in cases affecting the winding up of insolvent railway companies, and in admiralty matters.

G. T. Wilson, son of Jas. Wilson, Superintendent C.P.R. Telegraphs, Victoria, B.C., took first honors in his second year in Histology, and was twelfth in the honor list of successful candidates in chemistry at the Christmas examinations at McGill University, Montreal.

In the fire which did considerable damage to the C.P.R. warehouse at Montreal, Feb. 3, there were stored several cases of art goods belonging to Sir Wm. C. Van Horne, Chairman of the Board, C.P.R., as well as goods belonging to other of the company's officials.

J. Leitch, K.C., Chairman of the Ontario Railway and Municipal Board, whose health has not been good for some months, and who met with a slight accident in alighting from a street car recently, from which he has not altogether recovered, has gone south for a few weeks' change and rest.

Lady Gzowski, widow of the late Sir Casimir S. Gzowski, who was a large contractor for railway works, etc., died at Toronto, Feb. 18, aged 95. Her grandson is a member of the firm of Macdonnel, Gzowski & Co., contractors for the C.P.R. grade revision in the Kicking Horse Pass, B.C.

D. D. Mann, Vice-President C.N.R., accompanied by Mrs. Mann, their son and some guests, with his Secretary, left Toronto, Feb. 15, in his private car for Mexico, intending to visit Monterey, Mexico City, San Antonio and probably Florida. The party is expected to arrive back in Toronto early in March.

A. C. Turpin, heretofore Travelling Freight and Passenger Agent, Rock Island-Frisco lines, who was recently transferred to Chicago, Ill., as passenger agent, was entertained at luncheon in Toronto Feb. 1 by a number of local officials, who presented two handsome chairs, one for him and one for Mrs. Turpin.

W. T. Payne, General Superintendent of the C.P.R. Trans-Pacific steamship service, arrived at Victoria, B.C., Feb. 2, from Yokohama, where he was General Traffic Agent for the same company for twenty years. Before Mr. Payne left Japan, the Emperor conferred on him the Order of the Rising Sun of the third class.

E. G. Johnson, a clerk in the C.P.R. audit department, Montreal, has succeeded to a baronetcy, his uncle, Sir W. G. Johnson, fourth baronet, having died at Nice, on the Mediterranean, Jan. 30. The first baronet was associated with the administration of Indian affairs in the American colonies; and the second came to Canada after the declaration of independence.

Z. A. Lash, K.C., General Counsel Canadian Northern Ry., and E. R. Wood, director G.T. Pacific Ry., have been elected Vice-Presidents, and Hon. G. A. Cox, director G.T. Pacific Ry.; W. Mackenzie, President Canadian Northern Ry., and J. H. Plummer, President Dominion Iron and Steel Co., have been elected directors of the National Trust Co., Toronto.

A. W. Robinson, M. Can. Soc. C.E., of Montreal, sailed from New York, Feb. 26, having been commissioned to examine and report on the River Niger, with a view to improvement of navigation by dredging. He has also in hand the design of dredging plant for the extensive improvements on the Upper Nile, which the Egyptian Government are entering upon for irrigation purposes.

J. Stewart, who has been appointed Travelling Inspector of Locomotives and Cars, Intercolonial Ry., Moncton, N.B., has been in the service of that railway since 1880. He started shovelling ballast, then went car cleaning for 18 months, and after three years' service as fireman, was promoted to the position of driver in 1885, in which position he remained until his present appointment.

The Premier, in reply to a question in the House of Commons Feb. 3, said T. Williams, formerly accountant and Treasurer Intercolonial Ry., was still in the employ of the railway in the accountant's department, and was specially engaged in checking up the G.T.R. accounts on the joint section in consequence of the arbitrators' award against that company, also that his salary was at the rate of $2,700 a year.

Sir H. W. Tyler, who was President of the G.T.R. from 1877 to 1895, and who died in London, Eng., Jan. 30, aged 81, had been associated with railways in Great Britain in an official capacity for many years. He was appointed an inspector of railways under the Board of Trade in 1853, and became Chief Inspector in 1870, resigning in 1877 to become President of the G.T.R. He was also for some years a director and deputy chairman of the Great Eastern Ry. in England.

J. H. Brassard, who has been appointed Inspector of Transportation, Intercolonial Ry., was born at Murray Bay, Que., Feb. 26, 1859, and entered railway service in 1881, his record being: 1881 to 1883, telegraph operator G.T.R. at various points, and lastly train dispatcher Victoria Bridge, Montreal; 1883 to 1888, train dispatcher, Burlington and Missouri River Ry., Lincoln, Neb.; 1888 to 1899, train dispatcher on the Union Pacific Rd., and on the Gould lines in Texas and Louisiana; 1899 to Jan., 1907, Chief Dispatcher, Intercolonial Ry., Riviere du Loup, Que.

R. Quinn, who died at Detroit, Mich., Feb. 9, aged 65, commenced his railway service under the late F. W. Cumberland, on the old Northern Ry., Toronto. Upon the absorption of that line by the G.T.R., he was appointed General Freight Agent for that division, and subsequently until 1895 was European representative G.T.R. He then returned to Canada, being succes-

(Continued on page 193.)

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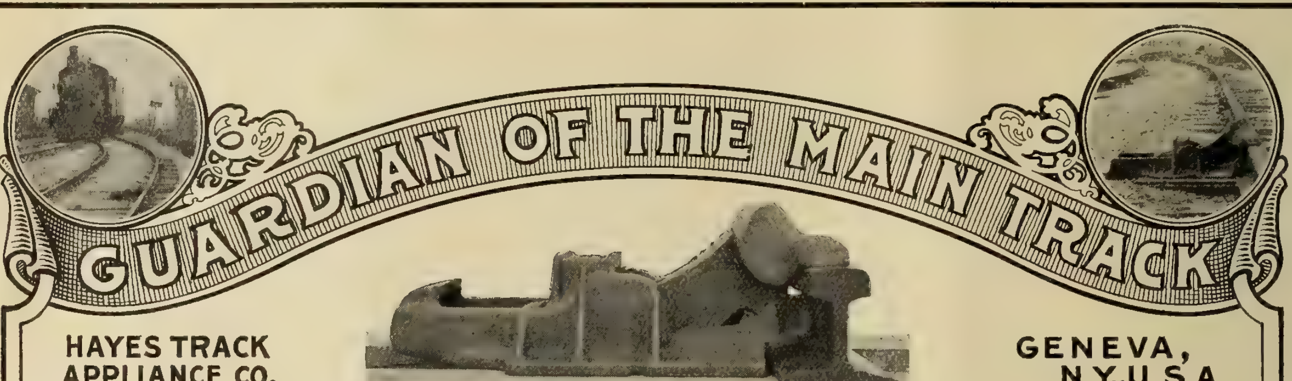
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The Wisconsin Circuit Court has overruled a motion by the State to quash a writ of mandamus procured by the Minneapolis, St. Paul and Sault Ste. Marie Ry., to compel the Wisconsin Railroad Commission to grant it authority to issue $14,000,000 of additional stock. The Commission declined originally to grant the authority because the company did not file an amendment to its articles of incorporation. It was held that a railway is not required to file an amendment showing its authority to issue additional stock. An appeal will be made to the Supreme Court.

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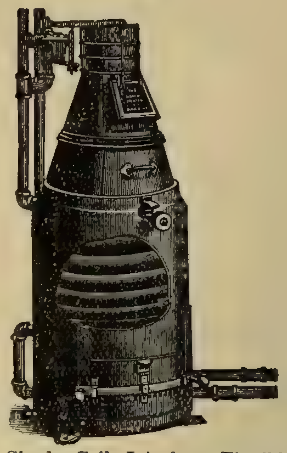

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WORKS & OFFICE - - - ST. THOMAS, ONTARIO

MAINLY ABOUT PEOPLE.

(*Continued from page* 189)

sively local freight agent G.T.R., Hamilton, and in the fast freight department G.T.R., Detroit, and claims agent C.P.R. at Vancouver, B.C., which position he resigned on account of failing health some time ago.

J. Kyle, who has been appointed Assistant Master Mechanic Canadian Northern Ry., Edmonton, Alta., was born in Toronto April 11, 1877, and entered railway service 1893, his record being: 1893 to Jan., 1899, apprentice and machinist, G.T.R. shops, Toronto and Niagara Falls, Ont.; Jan., 1899, to Mar., 1902, machinist, C.P.R. shops, Winnipeg; Mar., 1902, to Jan., 1903, shop foreman C.P.R. roundhouse, Winnipeg; Jan. to Feb., 1903, acting locomotive foreman, C.P.R., Winnipeg; Feb., 1903, to Jan., 1907, general foreman of shops, Canadian Northern Ry., Winnipeg; Jan., 1907, to Dec., 1907, Assistant Master Mechanic, same road, Winnipeg.

C. Drinkwater, who has relinquished the office of Secretary of the C.P.R., in order to devote himself to the company's parliamentary work, was born Nov. 17, 1843, and entered railway service in 1859, as clerk with the Manchester, Sheffield and Lincolnshire Ry., now the Great Central Ry., subsequently transferring to the Great Northern Ry. in 1861. Coming to Canada in 1864, he acted for ten years as secretary to the late Sir John A. Macdonald, after which he was, from 1874 to Feb., 1881, chief assistant to the Managing Director G.T.R., and from Feb., 1881, to date of present appointment, Secretary C.P.R. On May 1, 1901, he was also appointed Assistant to the President, and now has been appointed Senior Assistant.

O. O. Winter, General Superintendent G.T. Pacific Ry., Winnipeg, Man., whose portrait appears on the first page of this issue, was born in Ohio in 1856, and entered railway service as a brakeman on the Chicago, Rock Island and Pacific Rd., 1872, and was subsequently yardmaster. After some years' service with small lines in the Southern States he became Superintendent Great Northern Ry., U.S., in 1892, and later was appointed Assistant General Superintendent, subsequently becoming General Manager, Brainerd and Northern Minnesota Rd., which position he resigned in 1903. He then entered the C.P.R. service, serving successively as Assistant Superintendent of Terminals, Winnipeg; Assistant Superintendent district 2, Central Division, and latterly Assistant Superintendent district 3, Central Division.

W. B. Lanigan, who has been appointed Assistant Traffic Manager C.P.R., at Winnipeg, was born at Three Rivers, Que., and entered railway service in 1879, on the North Shore Rd., between Montreal and Quebec. He took service with the G.T.R. in Jan., 1881, remaining there till he went to the C.P.R. in Aug., 1884, since when he has been successively: Aug., 1884, to Oct., 1886, operator and relieving agent C.P.R., Sharbot Lake, Ont.; Oct., 1886, agent Claremont, Ont.; Nov. 1886, to April, 1887, agent, Myrtle, Ont.; April, 1887, to July, 1888, agent, Dundalk, Ont.; July, 1888, to July, 1891, agent, Galt, Ont.; July, 1891, to April, 1900, Travelling Freight Agent Ontario Division; April, 1900, to July, 1901, Assistant General Freight Agent, Ontario Division; July, 1901, to date of present appointment, General Freight Agent, Central and Western Division, Winnipeg, all service since 1884 with the C.P.R.

G. J. Bury, who has been appointed General Manager, C.P.R. Western Lines, was born at Montreal, Mar. 6, 1866, and was educated at Montreal College. He entered railway service on the C.P.R. 1883, since which his record has been: 1883 to 1887, clerk in Purchasing Department and in General Manager's office; 1887 to 1889, secretary to Vice-President, afterwards President; 1889 to Mar., 1890, acting superintendent dining, sleeping and parlor car service; 1890 to Sept., 1899, successively, Assistant Superintendent at Chalk River, Ont., and Superintendent North Bay, Ont.; Sept., 1899, to Feb., 1901, Superintendent, Fort William, Ont.; Feb., 1901, to Feb., 1902, Superintendent Crow's Nest Pass Line, Cranbrook, B.C.; Feb. to May, 1902, Assistant General Superintendent Lake Superior Division, North Bay, Ont.; May, 1902, to 1905, General Superintendent same division; 1905, to Feb., 1907, General Superintendent Central Division, Winnipeg; Feb., 1907 to Mar. 1, 1908, Assistant General Manager, Western Lines.

W. R. Baker, Assistant to the President C.P.R., who has, in addition, been appointed Secretary of the Company in succession to C. Drinkwater, was born at York, Eng., in 1852, and entered railway service in 1873 as local freight and passenger agent at Ottawa with the Canada Central Ry., since which he has been consecutively: Feb. to Sept., 1881, Assistant to General Superintendent and Local Treasurer Western Division C.P.R.; Sept., 1881, to May, 1882, Purchasing Agent, same division; May, 1882, to June, 1883, Assistant to General Manager, same road; June, 1883, to Sept., 1892, General Superintendent Manitoba and North-Western Ry.; Sept., 1892, to May, 1900, General Manager, same road; May, 1900, to June, 1901, Executive Agent C.P.R. at Winnipeg; June, 1901, to Jan., 1904, Assistant to 2nd Vice-President C.P.R. at Montreal; Jan., 1904, to Sept., 1905, Assistant to Vice-President C.P.R., Montreal; Sept., 1900, to Mar. 1, 1908, Assistant to President, C.P.R., Montreal.

F. W. Peters, who has been appointed Assistant to the Second Vice-President C.P.R., Winnipeg, was born at St. John, N.B., Mar. 25, 1860, and entered railway service in 1873, as telegraph operator with engineers on construction I.C.R., and from 1873 to 1876 acted as agent at Jacquet River and other points, same road; 1876 to 1878, assistant agent at Newcastle, N.B., same road; 1878 to 1880, agent Chatham Jct., N.B., same road; 1880 to Nov., 1881, relieving agent Chicago and Grand Trunk Ry., Fort Gratiot, Mich.; Nov., 1881, to May, 1882, billing clerk local freight office C.P.R., Winnipeg; May, 1882, to April, 1889, agent C.P.R., Brandon, Man.; April, 1889, to June, 1889, agent C.P.R., Fort William, Ont.; June, 1889, to Nov., 1896, local freight agent C.P.R. Winnipeg; Nov., 1896, to 1899, District Freight Agent, C.P.R., West Kootenay district, Nelson, B.C.; 1899 to Dec., 1900, Assistant General Freight Agent, same territory; Dec., 1900, to July, 1901, Assistant General Freight Agent, Pacific Division, C.P.R., Vancouver; July, 1901, to Dec. 31, 1902, General Freight Agent, same division; Jan. 1, 1903, to Mar. 1, 1908, Assistant Freight Traffic Manager Western Lines, same road.

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The railway bill introduced in the Commons by Mr. Lancaster, providing for the limiting of the speed of trains at railway crossings, etc., has been amended by the Senate, by the addition of a clause providing that no train shall pass over a highway crossing in a thickly settled portion of a city, town or village unless such crossing is constructed and maintained in accordance with the direction of the Railway Commission; that the Commission may from time to time fix the speed of the trains in any case at any rate that it deems proper, and that the railways have until Jan., 1909, to comply.

TRANSPORTATION APPOINTMENTS.

Canadian Northern Quebec Ry.—It is expected that F. M. Spaidal, Superintendent, will have his headquarters removed from Montreal to Quebec in the near future. The probability is that the operating and allied departments of the Quebec and Lake St. John Ry. will be merged with those of the C.N.Q.R. It is also said that the C.N.Q.R. stores department will be removed from Shawinigan Jct. to Quebec.

R. S. Richardson, formerly a C.P.R. Trainmaster on the Eastern Division, has been appointed Assistant Superintendent C.N.Q. Ry. at Montreal.

Canadian Pacific Ry.—C. Drinkwater, Secretary of the company and Assistant to the President, having asked to be relieved from some of the duties heretofore performed by him, he will, on and from March 1, relinquish the office of Secretary. He will retain the position of Assistant to the President under the title of Senior Assistant, with office at Montreal. He will, under the direction of the President, have charge of all matters affecting the company in connection with legislation of the Dominion Parliament and the legislatures of the Provinces of Ontario and Quebec, and also of the business of the company connected with the Board of Railway Commissioners and the several departments of Government at Ottawa, Toronto and Quebec; and will perform such other duties as may be assigned to him from time to time by the President.

The directors have appointed W. R. Baker, heretofore Assistant to the President, to be Secretary of the company, the appointment to take effect March 1. He will also be Assistant to the President in dealing with such of the company's affairs as may be placed in his charge.

J. W. Leonard, heretofore Assistant General Manager Eastern Lines, has been appointed General Manager Eastern Lines, in charge of maintenance of way and operation. Office, Montreal.

G. J O'Dowd has been appointed City Freight Agent at Quebec.

M. J. Buckley has been appointed locomotive foreman at Three Rivers, Que., vice W. J. Hamilton, transferred.

F. W. Cooper, heretofore Resident Engineer, district 2, London, Ont., has been appointed Resident Engineer, district 1, Toronto, succeeding W. A. Cowan, who becomes Resident Engineer at London.

G. J. Bury, heretofore Assistant General Manager Western Lines, has been appointed General Manager Western Lines, in charge of matters relating to maintenance of way and operation. Office, Winnipeg.

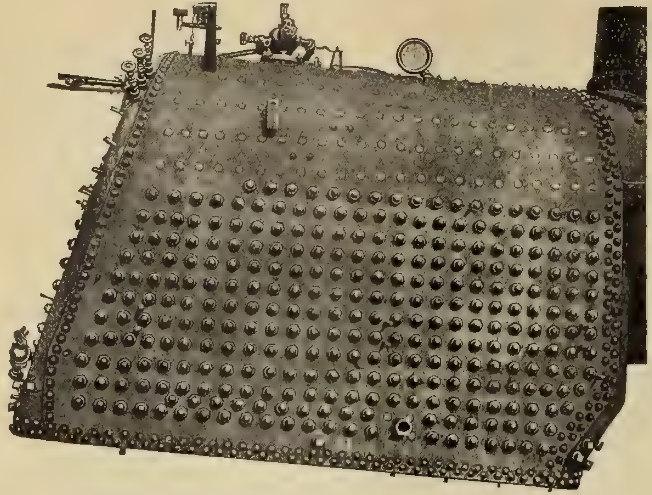
F. W. Peters, heretofore Assistant Freight Traffic Manager, Western Lines, has been appointed Assistant to the Second Vice-President, with office at Winnipeg. He will, under the direction of the Second Vice-President, have charge of such duties as may be assigned to him from time to time. We understand that his duties will be very similar to those which will be performed in the east by Mr. Drinkwater.

W. B. Lanigan, heretofore General Freight Agent, Western Division, has been appointed Assistant Freight Traffic Manager Western Lines, vice F. W. Peters, promoted. Office, Winnipeg.

G. E. Graham, heretofore Superintendent district 4, Central Division, has been appointed Superintendent Fort William and Port Arthur Terminals, vice J. G. Taylor, transferred to Moose Jaw, Sask.

T. G. Armstrong has been appointed general car foreman at Winnipeg, succeeding W. C. Hodgson.

R. R. Neild has been appointed general locomotive foreman at Winnipeg.



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P. S. Lindsay has been appointed road foreman of locomotives, district 3, Central Division, succeeding J. Stuart.

Allan Purvis, heretofore chief clerk in the General Superintendent's office, Vancouver, B.C., has been appointed Superintendent district 4, Central Division, succeeding G. E. Graham, transferred to Fort William, Ont. Office, Souris, Man.

J. G. Taylor, heretofore Superintendent Fort William and Port Arthur Terminals, has been appointed Superintendent district 1, Western Division, succeeding J. Brownlee, transferred to Cranbrook, B.C. Office, Moose Jaw, Sask.

T. R. Flett, heretofore Trainmaster at Calgary, Alta., has been appointed Trainmaster district 1, Western Division. Office, Moose Jaw, Sask.

Thos. Bates has been appointed locomotive foreman at Moose Jaw, Sask.

A. Mallinson has been appointed locomotive foreman, Medicine Hat, Alta.

J. Brownlee, heretofore Superintendent at Moose Jaw, Sask., has been appointed Superintendent district 4, Western Division, succeeding G. Erickson, resigned. Office, Cranbrook, B.C.

R. J. Lydiatt has been appointed Trainmaster at Calgary, Alta., succeeding T. R. Flett, transferred to Moose Jaw, Sask.

E. L. Chudleigh, heretofore acting Trainmaster at Moose Jaw, Sask., has been appointed Trainmaster district 4, Western Division, succeeding J. R. McNabb, transferred. Office, Cranbrook, B.C.

J. C. Reed has been appointed locomotive foreman at Cranbrook, B.C.

W. T. Payne, heretofore General Traffic Agent for Japan at Yokahama, has been appointed General Superintendent of the company's Trans-Pacific Steamship service, succeeding D. E. Brown, resigned. Office, Vancouver, B.C.

A. R. Owen, heretofore agent at Shanghai, China, has been appointed General Traffic Agent for Japan, succeeding W. T. Payne, transferred to Vancouver, B.C. Office, Yokohama, Japan.

Jas. Rankin has been appointed agent at Shanghai, China, succeeding A. R. Owen.

W. T. Wilgress, heretofore chief clerk in the company's Yokohama office, has been appointed agent at Kobe, Japan, succeeding Jas. Rankin.

Grand Trunk Pacific Ry.—Unconfirmed press reports state that J. E. Dalrymple, General Freight Agent G.T.R., will be transferred to Winnipeg, Man., to take charge of freight matters for the G.T. Pacific Ry. J. W. Loud, Freight Traffic Manager G.T.R., is also Freight Traffic Manager G.T. Pacific Ry., and W. J. Hunter, G.T.R. Commercial Agent at Winnipeg, was also appointed Division Freight Agent G.T. Pacific Ry. at Winnipeg, in Nov., 1907.

W. Gell, heretofore Master Mechanic G.T.R., Ottawa, has been appointed Master Mechanic G.T. Pacific Ry., in charge of motive power, cars and shops. Temporary headquarters, Winnipeg.

Grand Trunk Ry.—W. Sargeant has been appointed acting foreman erecting shops, Montreal, succeeding R. Cowan, promoted.

Robt. Cowan, heretofore foreman of erecting shops, Montreal, has been appointed Master Mechanic, Ottawa Division, succeeding W. Gell, resigned to enter the G. T. Pacific Ry. service. Headquarters, Ottawa.

F. P. Nelson, formerly Travelling Freight Agent, Hamilton, Ont., and latterly Soliciting Freight Agent at Toronto, has been appointed chief clerk, Division Passenger Agent's office, vice F. A. Nott, transferred to Montreal.

E. A. Fernley, of Toronto Jct., has been appointed Soliciting Freight Agent at Toronto.

R. P. Isbister, heretofore Soliciting Freight Agent, has been appointed Travelling Freight Agent at Hamilton, succeeding F. P. Nelson, transferred to Toronto.

E. R. Thorpe has been appointed Soliciting Freight Agent, Hamilton, Ont., succeeding R. P. Isbister, promoted.

W. M. Goodwin, formerly Chief Train Despatcher, London, Ont., and latterly chief operator there, who has been in the company's service for about 55 years, has been retired under the pension regulations.

F. A. Howe, General Agent, Chicago, Ill., after 40 years of faithful and continuous service with the company, retired Feb. 1, under the provisions of the pension rules.

G. J. Harris, heretofore agent Canada Atlantic Transit Co., Chicago, has been appointed Lake and Rail Agent, G.T.R., at Chicago, Ill., succeeding F. A. Howe, General Agent, retired.

We are officially advised that there is no foundation for the report in N.S. papers, referred to in our Feb. issue, that G. W. Dickson is to be appointed a master mechanic on the G.T.R. He is not entering the employ of the G.T.R. in any capacity so far as the Motive Power Department is aware

The following agents have been appointed: St. Dominique, Que., H. N. Bolte; Campbellford, Ont., P. Meyer; Barry's Bay, Ont., F. S. Partridge.

Halifax and Southwestern Ry.—G. C. Farish, heretofore Assistant Superintendent, Yarmouth, and since the death of J. G. Sullivan, acting as Superintendent of the whole line, has been appointed Claim Agent, and chief clerk to the General Manager. Office, Halifax, N.S.

Intercolonial Ry.—E. H. Allen, Claims Agent, has resigned to become Provincial Secretary of New Brunswick.

Maine Central Rd.—M. McDonald, heretofore General Superintendent, has been elected Vice-President and General Manager, succeeding the late G. F. Evans.

G. S. Hobbs, heretofore Controller, has been elected Second Vice-President.

Morrissey, Fernie and Michel Ry.—J. D. Hurd has been appointed General Manager, and J. B. Turney, Purchasing Agent. Office, Fernie, B.C.

Niagara Gorge Rd.—C. W. Graves has been Appointed District Passenger Agent for Ontario. Headquarters, 63 Yonge St., Toronto. This does not in any way affect R. M. Melville, of Toronto, who remains as Canadian Passenger Agent.

Pere Marquette Rd.—Following the reorganization the headquarters of various officials have been removed from Cincinnati, Ohio, where they had been associated with the Cincinnati, Hamilton and Dayton Rd., to Detroit, Mich.; the officers whose headquarters have been changed include the Vice-President and Controller; Secretary and Treasurer; and Freight Claim Agent.

The following appointments have also been made: W. C. Atherton, Purchasing Agent, Detroit; H. G. Meyers, Auditor of Disbursements, Detroit, succeeding F. A. Deverell; C. S. Sikes, Auditor Traffic Accounts, Detroit; H. K. Patriarche, Travelling Freight Agent, Detroit.

Temiskaming and Northern Ontario Ry.—W. A. Griffin has been appointed Traffic Accountant. Office, North Bay, Ont.

C. N. Ferguson has been appointed paymaster. Office, North Bay, Ont.

C. Henry, C. P. R. locomotive engineer, Ottawa, who has retired after 48 years' service as fireman and engineer, it is claimed was never in an accident and never received any injury, while during the whole period of his service only one man was run over by the locomotive he was on.

National Transcontinental Railway.

Tenders will be received by the Commissioners of the Transcontinental Ry. to Mar. 10 for the construction of the following additional sections of the line:

District A.—From about 58 miles west of Moncton, N.B., to the crossing of the Intercolonial Ry., at mileage 97.7, a distance of 39.7 miles. From the latter point to the Tobique River, at about mileage 165.7, less one mile, about 67 miles. From the Tobique River to about 2½ miles west of Grand Falls, N.B., about 31.5 miles.

District B.—From the Quebec-New Brunswick boundary westerly for about 52.4 miles.

District D.—From about eight miles west of the crossing of the Abitibi River, Ont., westerly for 100 miles.

District E.—From about 19.5 miles west of the crossing of Mud River, near Lake Nepigon, Ont., easterly for 75 miles.

The three sections to be tendered for in New Brunswick, with the sections now under contract, cover the entire mileage in that Province with the exception of a short distance at Moncton, the location of which has not been finally determined. The section in District B will connect up the contract for 150 miles easterly from the southern end of the Quebec Bridge, held by the Messrs. Davis, and the section from Great Falls to the New Brunswick-Quebec boundary held by Lyons & White. The section in District D runs westerly from near the junction with the Temiskaming and Northern Ontario Ry., which will be completed to that point during the summer, and so enable construction supplies to be got in. The section in District E will touch at a point to be reached by the navigable waters of Lake Nepigon, and is being let so that supplies can be got in by water.

Replying to a question in the House of Commons, Feb. 3, the Premier said there were approximately 1,803 miles of the line between Moncton, N.B., and Winnipeg, Man., located. About four miles remained to be located. About 859 miles were under contract, and tenders had been asked for an additional 365 miles. It was estimated that the obligations already entered into on account of the construction of the line amounted to about $38,000,000. Disbursements to Jan. 28, on account of the line, were $21,364,364.

Track has been laid at a number of points of the line under contract between the Quebec Bridge and La Tuque, Que., totalling altogether 34 miles, and from St. Boniface, Man., easterly, at a number of points, totalling 49 miles. This track will not exceed two or three miles in any one particular place, and has been laid to facilitate construction.

GRAND TRUNK PACIFIC RY.

In an interview, Feb. 12, the Minister of Public Works stated that he had been waited upon by C. M. Hays, President, and F. W. Morse, Vice-President and General Manager G.T. Pacific Ry., in connection with the provision of terminal facilities for the company on Courtenay Bay, St. John, N.B. Both these officials expressed themselves as being favorably impressed with the advantages which the bay would furnish for the purposes of the railway. He had discussed the matter with the Premier and several of his colleagues and they had expressed a willingness to make jointly with the city a conveyance of such foreshore rights as were necessary to the G.T. Pacific Ry. The subject of having borings made in order to test the character of the bottom had also been discussed, and the Government was willing to join with the city in bearing the expense of making the same.

Track has been laid on the Lake Superior

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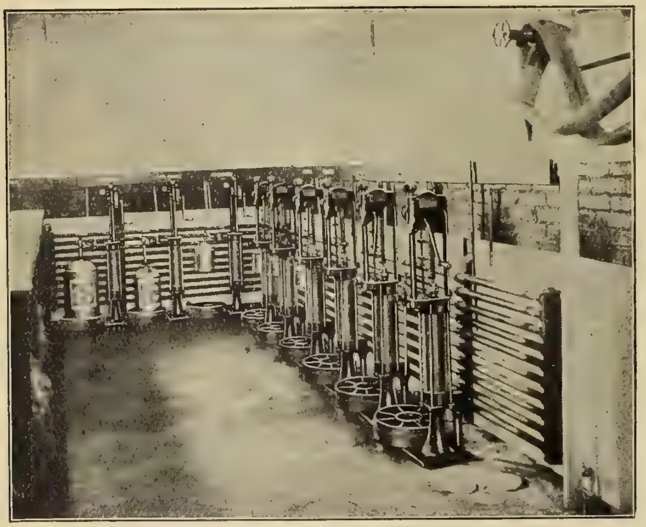

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branch from Fort William to Knowlton, Ont., about 100 miles, and seven miles of sidings have been laid. Tracklaying is being proceeded with. This branch will have a total length of about 200 miles and connects with the Eastern Division, under construction by the Transcontinental Ry. Commission, about 240 miles east of Winnipeg. For 65 miles west of Fort William until the height of land is reached the gradient is carried at the maximum, with the exception of a few short stretches. The maximum gradient, however, is light, being only 6-10 of 1%, compensated, and the curvature is kept at 6°. Very little grading remains to be done on the branch and it is expected to have the track laid to the junction in May.

Grading has been completed on the line between Winnipeg and Portage la Prairie, Man., and tracklaying will be commenced in the spring. On Dec. 31, 1907, track had been laid for 325 miles between Portage la Prairie, Man., and Saskatoon, Sask., as follows: From the crossing of the Assiniboine River east of Portage la Prairie, to Ituma, Sask., 274 miles; and from mileage 416.5 west of Winnipeg to the crossing of the South Saskatchewan River, 51 miles. There had also been laid 28 miles of main line sidings. Tracklaying is being proceeded with and it is expected to have the line completed into Saskatoon during the summer. For the accommodation of freight trains, yards are being laid out west of the Canadian Northern Ry. station and about three miles of side tracks were reported to have been laid Feb. 13. Temporary shops and a roundhouse will be put under construction early in March in order to be ready for the opening of the line.

For the first 40 miles west of Portage la Prairie the line is reported to be without a curve; then in passing through the sand hills there are but three easy curves; and then another stretch of 40 miles without a curve, and with a gradient of 4-10 of 1%. This has been accomplished by cutting through hills, many over 40 ft. high, and by making fills, of as great a height, while at certain points trestles, some nearly a mile long, and one 120 ft. in height, are required. These trestles will in the future be filled in, and steel bridges will be constructed where streams are crossed. At Rivers, the first divisional point, the whole yard was dug down from six to ten feet in order to maintain the gradient.

West of Saskatoon a considerable portion of the grading has been completed, and it is expected that the track will be laid into Edmonton, a further distance of 328 miles, or 794 miles from Winnipeg, by the fall.

A contract has been let to Foley, Welch & Stewart, successors to Foley Bros. & Larson, for the construction of 126 miles of line from Edmonton westerly to Wolf Creek. Preliminary work is to be started at once, about six miles west of Edmonton. The work is said to be difficult, a large part of it being through scrub and marsh running up to the foothills of the Rocky Mountains. The contract price is said to work out at nearly $50,000 a mile. Contracts are reported to have been let for the ties for this portion of the line as follows: Carruthers, Round & Co., $100,000; McPhee Bros. & Hislop, $100,000; H. A. Calder, $200,000. Delivery is to start early in the spring, and to continue to July, 1909.

W. Wainwright, Second Vice-President G.T. Pacific Ry., on his return to Montreal from Victoria, B.C., Feb. 13, stated that the result of his negotiations with the Provincial Government regarding the 13,000 acres of auxiliary lands that the G.T. Pacific Ry. Co. acquired from the Indians for townsite purposes at Prince Rupert, had been satisfactory. Some matters had been definitely settled, but others had been reserved for the final decision of the President and Vice-President. He also stated that no option had been given on the townsite, and no portion had been sold.

A contract is reported to have been given to Brett & Hall, Boston, Mass., for the laying out of the site of Prince Rupert. There are 16 miles of water front, and the area of land available will enable the laying out of a city upon generous and handsome lines.

The question of the letting of a contract for the construction of 100 miles easterly from Prince Rupert, is understood to be a matter which C. M. Hays, President, will discuss with the directors of the G.T.R. during his present visit to London, Eng. The cost of this 100 miles is estimated at about $7,000,000. It extends from Prince Rupert to the Kiteselas, and includes a large percentage of heavy rock work. It is also stated that there will be several tunnels, one at a place called Hole-in-the-Wall having an estimated length of 2,200 ft.

◆

C. P. R. Betterments, Construction, Etc.

Atlantic Division Bridges.—A contract is reported let for the erection of three concrete piers in bridge 53.7, Woodstock section, at the first crossing of the St. John River at Upper Woodstock, N.B. The contract requires that the three piers must be completed to low water mark by Mar. 30.

New Brunswick Ry.—The C.P.R., exercising the franchises of the N.B. Ry. as lessee, has deposited with the local authorities plans for change of location of the line in the Parish of St. Leonard's, Madawaska County, N.B., and for a new bridge across the St. John River in the same parish, which have already been approved by the Board of Railway Commissioners. It has also deposited with local authorities plans of a change of line, and a new bridge at the crossing of the Grand River, also in the Parish of St. Leonard's, N.B.

Montreal and Lake Maskinonge Ry.—The C.P.R., as lessee of this branch line, extending from St. Felix to St. Gabriel de Brandon, Que., 11 miles, is applying to the Board of Railway Commissioners for authority to construct two short spur lines near St. Gabriel.

Angus, Montreal, Shops.—During 1907, extensive additions were made to these shops. The additions are as follows: Single story extension to locomotive shop, 166 x 46 ft., to be used as a flue and flanging shop; single story building, 60 x 50 ft., to be used in connection with locomotive department as casting storehouse; single story extension to blacksmith shop, 125 x 70 ft. 6 in., to be used in connection with locomotive department; a double story extension, 250 x 75 ft., to what has been used as upholsterer's shop and hardwood storage; a double story building, 300 x 75 ft., to be used as upholsterer's shop, the shop vacated by upholsterers and the new extension, in all 525 x 75 ft., to be used as cabinet shop; a single story building, 80 x 50 ft., to be used for carpet beating and cleaning; a single story car building shop, 672 x 100 ft.; this building completes the original plan of four car buildings, each having a capacity of 28 cars. In adding this addition to car capacity, it was found necessary to add an additional electric power transfer table, the transfer pit being extended 672 ft., making a total run for the transfer table of 1,750 ft. To meet the extra requirements for heat, power and light, the power house was extended 64 x 103 ft., and the boiler capacity increased 46%, electric generating capacity 23%, and the per foot capacity of air power increased 50%. For fire protection, two hose and reel houses, 17 x 29 ft., were built, located north and south of the midway. All the buildings and extensions, with the exception of the casting storehouse and the carpet cleaning building, were built of brick with cement foundations; the two exceptions were constructed of wood, sheet iron encased.

Montreal Stock Yards.—Tenders were asked, Feb. 16, for the construction of new stock yards which it is the intention of the company to establish at Montreal. They are to be situated on Frontenac St., and it is estimated will cost over $1,000,000. The specifications call for the completion of the work by the end of July.

Northern Colonization Ry.—A subsidy contract has been entered into by the company with the Dominion Government for the construction of a line from Lake Nominingue to Le Lievre, Que., 35 miles. The ultimate intention is to extend the line so as to connect with the old Ottawa and Gatineau Colonization Ry. at Manawaki.

Campbellford, Lake Ontario and Western Ry.—An act extending the time for the construction of this projected railway for two years for commencement and five years for completion, has been passed at the current session of the Dominion Parliament.

A recent Montreal despatch stated that the C.P.R. had no intention of abandoning the construction of this line, which has been surveyed from the Ontario and Quebec Ry., east of Smith's Falls, and serving the Lake shore towns, to a junction with the O. and Q. Ry. near Leaside Jct. The construction of this line, it was stated, would do away with the necessity of constructing a second track on the present line, and further, that when a double track line between Montreal and Toronto became necessary, the second track would be constructed on the right-of-way of the C., L.O. and W. Ry.

Lindsay, Bobcaygeon and Pontypool Ry.—The Dominion Parliament is being asked at the current session for an act extending the time within which to complete the construction of this railway as authorized in 1901. The extension in question, as authorized, is from Bobcaygeon, through the townships of Verulam, Harvey, Galway and Snowden, to the Irondale, Bancroft and Ottawa Ry. within ten miles of Furnace Falls, Ont.

Hamilton and Guelph Junction Ry.—Application is being made at the current session of the Ontario Legislature for an act extending the time within which this line may be commenced and completed. While the line is projected by a local company at Hamilton, it is understood that the construction will be done by the C.P.R., which operates the Guelph Junction Ry. It was stated in Hamilton, Feb. 4, that the local company had received a letter from the C.P.R. management stating that it was prepared to go ahead with the construction of the line between Hamilton and Guelph Junction as soon as the question of the right-of-way through the city is settled. This is again under consideration by the city council.

South Ontario Pacific Ry.—Application is being made at the current session of the Dominion Parliament for an act extending the time for the commencement of construction of this railway for a further period of two years.

Extensions in London, Ont.—Reports are current in London, Ont., that C.P.R. agents have been in the city recently obtaining options on large areas of land along its line west of the city. The report states that it is contemplated to establish extensive freight yards and terminals there.

West Ontario Pacific Ry.—The Dominion Parliament, at its current session, has passed an act extending the time for the construction of this company's projected branch line, which was specifically authorized to be constructed by sec. 1, chap. 178, of the Statutes of 1906, the route being from the company's line at or near London, Ont.,

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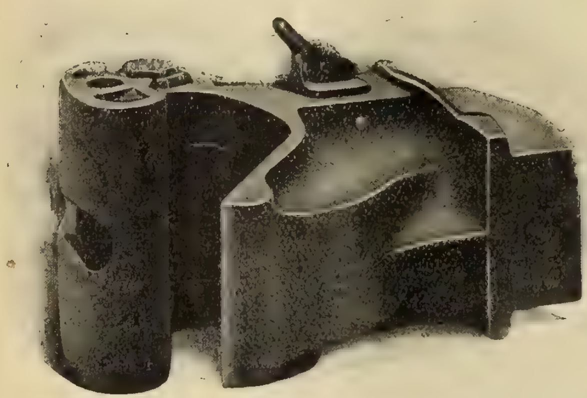

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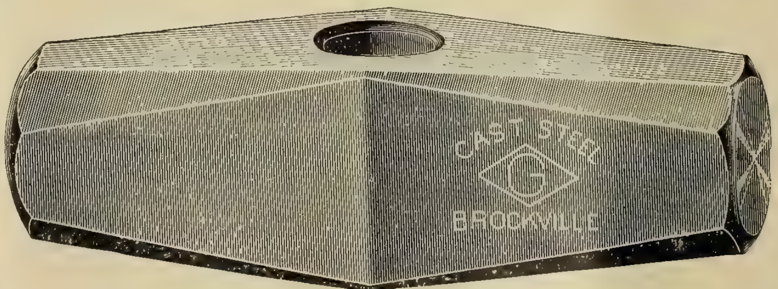

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St. Mary's and Western Ontario Ry.—Track has been laid on the first three miles of this line, and grading is in progress upon the remaining 12 miles; no ballasting or surfacing has been done. J. E. Webb, Toronto, is the contractor. Location surveys are in progress for an extension of the line from St. Mary's to Sarnia, Ont., about 74 miles; J. G. Macklin, St. Mary's, Ont., being Chief Engineer. In connection with this work it was recently reported that the surveys had been completed as far as Exeter.

Guelph and Goderich Ry.—Track has been laid on the branch from Linwood to Listowel, Ont., for a distance of 13 miles, and it is expected to have the remaining 3½ miles completed at an early date. B. Gibson, Toronto, is the contractor, and P. A. Peterson, Goderich, Chief Engineer.

Walkerton and Lucknow Ry.—Track was laid to Dec. 31, 1907, from mileage 0 to 24, and construction trains have been running into Hanover, Ont., since Christmas. A big pile bridge has to be erected at this point before tracklaying can be resumed towards Walkerton, and it was expected that this would be completed by the end of Feb.

Toronto-Sudbury Line.—J. Ross, of Ross and Harris, contractors for the construction of 40 miles on this line, is quoted as having stated in Montreal, Feb. 13, that track had been laid on the last section, and that the entire line will be completed in June. Two steam shovels were at work and the ballasting is being gone on with as rapidly as possible. The line was constructed as a branch of the C.P.R. from near Romford, 6.2 miles east of Sudbury, southerly to Bolton Junction, on the old Toronto, Grey and Bruce Line.

Fort William-Winnipeg Second Track.—During 1907, the work of constructing a second track between Fort William, Ont., and Winnipeg, Man., has been proceeded with, and there was taken over by the operating department additional stretches aggregating 100 miles in Ontario and 80 miles in Manitoba. With the 30 miles completed in 1906, there is now 210 miles of second track in operation, in addition to the mileage which was constructed at various points as crossing places for trains, prior to the decision to second track the line, making altogether 224 miles, distributed as follows: Fort William to Finmark, Ont., 35 miles; near Falcon to Ignace, Ont., 10 miles; from Ignace to Raleigh, Ont., 15 miles; from near Dryden to Vermillion, 30 miles; from MacMillan to Kenora, Ont., 17 miles; from Kenora, Ont., to Winnipeg (with the exception of eight miles between Kalmar and Ingolf), 117 miles. On the remaining 196 miles there has been done a considerable amount of rock-cutting, filling, grading and bridge building. It is the intention of the company to have this work completed during the current year.

Winnipeg Beach Branch.—The relaying of the line to Winnipeg Beach, 51 miles, with 80-lb. rails, will be started early in the spring, and it is expected to have the work completed before the rush of the summer traffic commences.

Teulon Branch Extension.—The construction of an extension of the Teulon branch from the present terminus to Icelandic River, about 26 miles, will be gone on with during the coming season, and it is intended to have it completed by the end of the year.

Manitoba and North-Western Ry.—By an act passed at the current session of the Dominion Parliament, authority is given for the construction of a branch from near Theodore, southeasterly to a junction with the Russell branch, in tp. 20 or 21, range 28, west of the principal meridian, a distance of about 110 miles. The branch is to be commenced within two years, and completed within five years, and bonds to the amount of $20,000 a mile may be issued.

The line is at present in operation to Sheho, Sask., 256 miles from Portage la Prairie, Man., and a considerable amount of grading has been done between Sheho and Lanigan, at which point a junction will be effected with the Pheasant Hills branch, starting from the main transcontinental line at Kirkella, near the Manitoba-Saskatchewan boundary. It is proposed to complete this 82-mile stretch during the current season. Trains are already in operation over the Pheasant Hills branch from Kirkella, via Lanigan, to Saskatoon, 330.9 miles. There is also a line in operation from Saskatoon westerly to Asquith, and a considerable amount of grading has been done with a view of connecting up the line with the Wetaskiwin branch of the Calgary and Edmonton Ry., now terminating at Hardisty, Alta., where the Battle River will have to be crossed. It is proposed to continue and possibly complete work on this line during the current season. The distance from Saskatoon to Hardisty is 326 miles.

Bredenbury to Esterhazy.—It is proposed to complete the construction of the line between Bredenbury on the Manitoba and North-Western Ry., and Esterhazy, Sask., on the Pheasant Hills branch, about 20 miles.

Sheho to Prince Albert, Sask.—Surveys are reported to be in progress for the construction of a line from Sheho to Prince Albert, Sask. A survey party passed through Humboldt recently.

Wolseley-Reston Line.—We are advised that it is intended to carry to completion during the current season the line to connect Wolseley, Man., at mileage 1,718 on the transcontinental line, with Reston, Man., on the Arcola-Regina line. Track was laid on this line during 1907, from Reston, Man., to Kaiser, Sask., 98.2 miles, of which 25 miles are in Manitoba. The total length of the line is to be 122.8 miles, so that there is 24.3 miles between Kaiser and Wolseley yet to be completed.

Weyburn to Stoughton.—A line about 40 miles long has been graded between Weyburn, Sask., on the Portal line, and Stoughton, Sask., on the Arcola-Regina line, and it is intended, during the current year, to lay track and complete the line for operation.

Moose Jaw Northerly.—Of this branch, which is at present in operation from Moose Jaw to Tuxford, Sask., it is expected to complete a further distance of 50 miles during the forthcoming construction season. The grading was reported to have been practically completed to mileage 50 in Aug., 1907, at which time a contract was let to J. D. McArthur for grading the line to mileage 123. This line is intended to connect with the Lacombe Branch of the Calgary and Edmonton Ry., at present in operation to Stettler, Alta.

Swift Current-Medicine Hat Grade Revision.—The work of grade revision, which has been going on for some time between Swift Current, Sask., and Medicine Hat, Alta., 153 miles, will be completed during the current season.

Lethbridge to McLeod.—The programme of work arranged for the current season includes the reconstruction of the line between Lethbridge and McLeod, to avoid the circuitous route now followed, owing to the erratic course of the Belly River. This work involves the construction of a high level bridge across the Belly River, described Aug., 1907, pg. 587.

Wetaskiwin Station.—A contract for the erection of a station at Wetaskiwin, Alta., has been let to the McDiarmid Co., Winnipeg, Man., which company is building the station at Strathcona. Work has already been commenced on the foundations.

Killam to Strathcona, Alta.—Application is being made at the current session of the Dominion Parliament for an act authorizing the company to construct or acquire a line of railway from near Killam, a station on the Wetaskiwin branch of the Calgary and Edmonton Ry., mileage 70, northwesterly to, at or near Strathcona, Alta. The company may issue bonds to the extent of $25,000 a mile of the branch, or may issue consolidated debenture stock in lieu of the bonds.

Pacific Division Bridges.—A considerable amount of money will be expended during the coming construction season, said W. Whyte, Second Vice-President, on his return to Winnipeg from Montreal, upon the improvement of the main and branch lines in British Columbia. This will consist principally in the substitution of masonry and steel bridges for the present wooden ones.

Hector Grade Revision.—The work of driving the two tunnels on the grade revision work between Field and Hector, B.C., is to be taken in hand at once. Workmen at present are clearing the approaches and getting all ready for the drillers. It is intended to work from both ends of each tunnel. Macdonnell and Gzowski are the contractors.

Kootenay District.—The appropriations for the year provide for the elimination of the big loop at the Northern Lode mine, and the substitution of a switchback therefor; the laying of about 20 miles with new 85-lb. steel, the filling in of trestles or the substitution of steel or concrete spans for woodwork.

British Columbia Southern Ry.—At the current session of the Dominion Parliament, an act has been passed granting a further extension of time for the construction of the projected line between Fort Steele and Golden.

Kootenay Central Ry.—The construction of the line from Golden to Spence's Bridge, B.C., will be proceeded with during the current season, W. Whyte, Second Vice-President, stated, after his recent visit to Montreal, to discuss the construction programme for the year. The work, however, will not be rushed.

Grand Forks, B.C.—F. F. Busteed, General Superintendent Pacific Division, has completed a trip over the division in connection with the appropriations for the current year. It is reported that the plans include the laying out of division buildings at Grand Forks, B.C. The expenditure, it is said, during the year, will amount to $150,000, provision being made for a 15-stall roundhouse, with coal chutes; a $40,000 station building, and an expenditure of $40,000 upon yard accommodation.

Bridge at Mission.—The British Columbia Government has opened negotiations with the C.P.R. with the object of arranging for the construction of a general traffic addition to the bridge which the company proposes to erect over the Fraser River at Mission.

Empress Hotel, Victoria.—This hotel, which was illustrated and described June, 1905, pg. 241, and Aug., 1905, pg. 365, has been opened for business.

Esquimalt and Nanaimo Ry.—By an act passed at the current session of the Dominion Parliament, the company has been granted an extension of time for the construction of the lines authorized by its Act of 1906. These lines are an extension of the main line to Comox, and a number of branches including the following: From Comox to Campbell River; from near Duncans to Alberni, via Cowichan Valley; from near Englishman's River to the Alberni Canal; and from near Comox to the Alberni Canal via Cumberland

Two contracts have been let in connection with the extension of the line from Wellington to Alberni, B.C Between Wellington and Nanoose Bay, a distance of 12 miles, the contract is for the grading of the right-of-way

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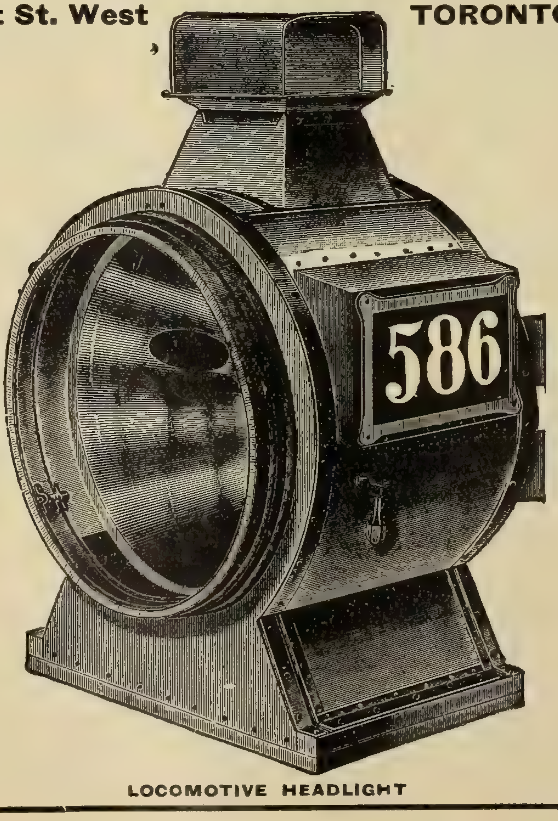

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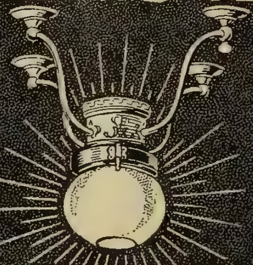

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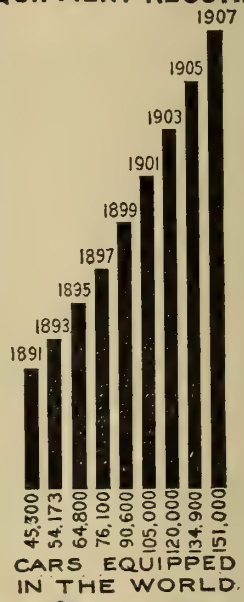

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ready for tracklaying, and the contract for the 46 miles between Nanoose Bay and Alberni, covers the clearing of the right-of-way only J. Bright, Vancouver B.C., has one contract, and A. Carmichael is reported to have the contract for clearing at the Alberni end. It is also proposed to undertake at some time a line from French Creek to Campbell River, a distance of about 90 miles. Preliminary surveys for this line are being made. C. E. Cartwright, Vancouver, B.C., is Chief Engineer.

Duluth, South Shore and Atlantic Ry.—The construction work of this company during 1907 was limited to the laying of about four miles of spur tracks for industrial concerns at various points along the line.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—During 1907, the company entered upon the construction of a line from Brooten to Duluth, Minn., a distance of 187 miles. Upon this there was laid to Dec. 31, from the Brooten end, 49.96 miles of track. The contractors are Foley Bros., Larson & Co, St. Paul, Minn. It also laid track on a line between Dogden and Max, N.D., 27.70 miles

Press reports state that the company has plans under consideration for the extension of its line from Thief River Falls, Minn., northeasterly to Roosevelt, at the Canadian boundary, a distance of about 82 miles.

Steam Railway Track Laid in 1907.

The total single track laid on Canadian railways during 1907 is ascertained, from official information supplied by the various companies to have been 1,454.38 miles, distributed as follows:

	Miles.	Miles.
CANADIAN NORTHERN ONTARIO RY.		
Between Parry Sound and French River, Ont	45.3	
Between French River and Sudbury	45.2	
Key Harbor branch	6.0	
Hutton Mines branch	20.6	
Garson Mines branch	3.6	
		120.70
CANADIAN NORTHERN QUEBEC RY.		
St. Jerome to Montford	15.60	
Garneau Jct. easterly	12.40	
St. Anne's River to Belle Isle River	7.50	
		35.50
CANADIAN NORTHERN RY.		
From Brandon to Regina. Sask	219.90	
From Rossburn towards Russell, Man	13.64	
From Cardinal to De Lourdes, Man.	1.24	
From Virden main line to Station, Man	0.63	
Oakland extension, Man	17.14	
Towards Pas Mission, Sask	11.48	
Atikokan spur, Ont	3.31	
		267.34
CANADIAN PACIFIC RY.		
Toronto-Sudbury Line. — Mileage 92.20 to 160.20	68.00	
From mileage 185.70 to 202.50	16.80	
Guelph and Goderich Ry. — From mileage 63.60 to 80.00	16.40	
Listowel branch.—From Linwood towards Listowel	13.00	
Walkerton and Lucknow Ry.—Mileage 0 to 24	24.00	
St. Mary's and Western Ontario Ry. From mileage 0 to 3	3.00	
Pheasant Hills branch.—Newdorf to Lanigan, Sask	148.70	
Pheasant Hills branch.—Lanigan to Saskatoon, Sask	76.10	
Moose Jaw to Tuxford, Sask	15.30	
Wolseley-Reston branch.—Reston, Man., to Kaiser, Sask	98.20	
		479.50
CENTRAL ONTARIO RY.		
Bird's Creek to Maynooth, Ont		10.00
MARITIME COAL AND RY. CO.		
From Joggins old mine to new mine		1.00
MIDLAND RY. OF MANITOBA.		
International boundary north of Walhalla, N.D., to Morden, Man.		15.54
NAPIERVILLE JUNCTION RY.		
Loop connecting the line with the C.P.R. and G.T.R. at St. Constant, Que	1.40	
Transfer connection with G.T.R. at Lacolle, Que	0.35	
		1.75
NATIONAL TRANSCONTINENTAL RY.		
Between Quebec Bridge and La Tuque, Que	34.00	
From St. Boniface, Man., easterly.	49.00	
		83.00
GRAND TRUNK PACIFIC RY.		
From track end 35 miles westerly from Portage la Prairie to Ituma, Sask	239.00	
From milepost 416.5 west of Winnipeg, to crossing of the South Saskatchewan River	51.00	
Lake Superior branch.—From Fort William to Knowlton, Ont	100.00	
		390.00
ORFORD MOUNTAIN RY.		
From Mansonville, Que., southwards toward North Troy, Vt		2.50
QUEBEC AND LAKE ST. JOHN RY.		
From mileage 28 to La Tuque, mileage 40	12.00	
From mileage 4 to Clark's, Gosford branch	1.50	
		13.50
QUEBEC, MONTREAL AND SOUTHERN RY.		
From Pierreville to station 1220, Que		4.00
TEMISKAMING AND NORTHERN ONTARIO RY.—From McDougall's Chute to milepost 208		5.00
VANCOUVER, VICTORIA AND EASTERN RY.—Chopaka to Keremeos		18.00
WINNIPEG CITY POWER PLANT RY.—From Lac du Bonnet, Man., to Winnipeg River Crossing		2.50
YORK AND CARLETON RY.—		
Stanley to Ryan Brook, N.B		4.55

The C.P.R. shows the largest mileage of new track laid, 479.50 miles, and when to this is added the 180 miles of second track laid between Fort William and Winnipeg, it stands far in advance of any of its competitors. The Canadian Northern lines come next with 423.54 miles, or 436.04 if the mileage laid by the Quebec and Lake St. John Ry., which is controlled by the same interests, is included. The G.T. Pacific Ry. comes third with 390 miles of new track. Arranged by provinces the mileage is as follows:

	1907	1906
Saskatchewan	609.68	171.76
Ontario	380.21	336.06
Manitoba	349.69	272.69
Quebec	91.25	113.10
British Columbia	18.00	76.09
New Brunswick	4.55	14.85
Nova Scotia	1.00	89.88
Alberta	......	97.63
Yukon	......	32.00
	1,454.38	1,204.06

The C.P.R. subsidiary company, the Minneapolis, St. Paul and Sault Ste. Marie Ry., laid 77.66 miles of new track, viz.: From Dogden to Max, N.D., 27.70 miles, and from Brooten towards Duluth, Minn., 49.96 miles; and its other subsidiary company, the Duluth, South Shore and Atlantic Ry., laid four miles of branch tracks, making altogether 81.66 miles of additional lines. United States lines serving districts parallel with Canadian lines, on connecting with Canadian lines, constructed the following additional mileages during 1907:

BANGOR AND AROOSTOOK RD.	
South Lagrange to main line junction at West Sebois, Me	33.00
BIG FORK AND INTERNATIONAL FALLS RY.—Big Fork River to International Falls, Minn. (opposite Fort Frances, Ont.)	34.00
DULUTH, RAINY LAKE AND WINNIPEG RY.—Near Ash Lake to Ramer, Minn. (opposite Fort Frances, Ont	35.00
MINNEAPOLIS AND RAINY RIVER RY.—Branch lines	5.34
WASHINGTON AND GREAT NORTHERN RY.—South of Oroville to International boundary, Washington, B.C	20.65
	127.99

Since the above was put in type we have been advised that the C.P.R. also laid ¾ of a mile of track on its South Bank branch at Montreal, and 2 miles on its extension from Nomining, Que, northwesterly. This brings the total for the Dominion up to 1,457.13 miles and the C.P.R's mileage up to 482.25.

◆

Western Freight Rate Cases.—The Board of Railway Commissioners has reserved judgment in the application of the Great Northern Ry., U.S., to compel the Canadian Northern Ry. to concur in a joint tariff rate of $2.50 a ton on coal from Duluth to Winnipeg. Several sittings of the Commission were also held at Ottawa in connection with the application of the Winnipeg Board of Trade for the disallowance of the C.P.R. new schedule of rates for Western traffic. The arguments were concluded Feb. 14 and judgment reserved.

G.T.R. Betterments, Construction, Etc.

Ottawa Union Station and Hotel.—The Dominion Parliament is being asked by the Minister of Public Works at the current session for an act confirming an order-in-council, dated Sept. 20, 1907, authorizing the sale of a part of Major's Hill Park to the G.T.R., for the purposes of a site for an hotel, and directing that the proceeds of the sale shall be placed to the credit of the Ottawa Improvement Commission.

Plans have been submitted to the Ottawa Board of Control by the G.T.R., showing an hotel and station, the former to cost $1,000,000, and the latter $500,000. Some opposition has been shown to the acceptance of the plans by the city owing to the amount which the company first announced its intention of spending having been cut down.

Barrie Shops.—An agreement has been reached with the G.T.R., fixing the assessment of the company's property—present and future—for 25 years at $35,000, in consideration of which the company agrees to spend at least $150,000 upon the construction and equipment of car shops at Allandale.

London, Ont., Improvements.—A prominent official is quoted as having stated to the London City Council that the question of track elevation in the city, which has been under discussion for two or three years, will not be further considered by the company this year. As a result of this intimation the city council has appointed a special committee to deal with railway matters.

St. Clair Tunnel.—The inauguration of the system of electric traction at the tunnel took place Jan. 29. The work of installing the plant has been in progress for several years. Large powerhouses have been erected, one at the Sarnia end of the tunnel, and the other at the Port Huron end, and an overhead system of wiring installed. Six powerful electric locomotives are in course of delivery, the entire equipment being expected to be delivered early in March.

◆

Change in Per Diem Rate for Cars.

At the special session of The American Railway Association, held at Chicago, Ill., on Feb. 7, 1908, the following resolution was adopted:

Resolved, That the question of a change of rate in Rule 1 of the Per Diem Rules from 50 cents to 25 cents be presented to the members of the Association for a letter ballot; the amended rate, if adopted, to take effect on Mar. 1, 1908, provided, that it is approved by a majority of the membership of the Association representing two-thirds of the cars owned or controlled by the members of the Association, and after announcement by the Secretary of the requisite majority having been obtained. The ballot to close on Feb. 25, 1908.

In accordance with the foregoing resolution the question of the change of rate was submitted to the members of the Association for a letter ballot. The result of the voting on the question submitted was as follows: Yes—243 memberships, representing 1,601,355 cars owned or controlled. No—75 memberships, representing 589,635 cars owned or controlled. Not voting—17 memberships, representing 30,142 cars owned or controlled. The total membership of the Association is 335 and the cars owned or controlled by the members, 2,221,132. The majority requisite for approval is 168 memberships and 1,480,755 cars.

In accordance with the resolution of the Association announcement has been made by the Secretary that the question has been decided in the affirmative and that the amended rate will take effect on March 1, 1908.

ELECTRIC RAILWAYS.

Electric Railway Track Laid in 1907.

According to reports received from 11 companies, 72.27 miles of track were laid during 1907, of which 50.11 were in Ontario, 18.49 in Manitoba, and 3.67 in Quebec. The longest mileage reported laid was by the Brantford and Hamilton Ry., which completed 21.85 miles of track, the remaining mileage reported laid being extensions of existing lines. The returns are by no means complete, but many of the companies continue to show, as they have always shown, a disinclination to furnish statements of mileage, etc. The details of track laid, so far as reported, follow:

	Miles.	Miles.
Berlin and Waterloo Ry.—Church St. extension, Waterloo (438 ft.)		0.83
Brantford and Hamilton Ry.—From Hamilton to Ancaster	6.53	
From Ancaster to Cainsville	12.62	
From Cainsville to Brantford	2.68	
		21.85
Montreal Park and Island Ry.—From Snowdon's to Blue Bonnets		1.11
Montreal St. Ry.—Papineau Ave. extension		1.98
Montreal Terminal Ry.—From main line to Rifle Ranges		0.58
Niagara, St. Catharines and Toronto Ry.—From Thorold to Fonthill, Ont		7.00
Sandwich, Windsor and Amherstburg Ry.—Windsor and Tecumseh Electric Ry., from Walkerville to Tecumseh, Ont	8.00	
In Walkerville town	1.45	
		9.45
Southwestern Traction Co.—From St. Thomas to Port Stanley, Ont		9.00
Toronto Ry.—Various extensions in the city (about)		2.00
Winnipeg Electric Ry.—Various extensions and new lines		18.49

◆

Projects, Construction and Betterments.

B. C. Electric Ry.—A petition is under the consideration of the management, respecting the extension of the Spring Ridge line, in the north-eastern section of Victoria.

Detroit United Ry.—At the recent annual meeting of the company, the opinion was expressed that the financial statement was evidence of the prosperity of the company, and that the earnings of the current year would justify the resumption of a dividend. J. M. Wilson, Montreal, and C. M. Swift, Detroit, Mich., were added to the directorate. This company owns the Sandwich, Windsor and Amherstburg Electric Ry.

Dunnville, Wellandport and Beamsville Electric Ry.—Application is being made at the current session of the Ontario Legislature, for an act amending the act of incorporation, and extending the time for the commencement and completion of the undertaking, and extending the proposed route from Dunnville through Dunn, South Cayuga, Rainham, Walpole and Woodhouse to Port Dover.

Hamilton, Waterloo and Guelph Ry.—The Board of Railway Commissioners has granted an order for a right-of-way through G.T.R. property, north of Harvey and Dundurn Parks, Hamilton, and the company hopes to commence construction early in the spring. A private right-of-way has been obtained for a portion of the way, but for the most part the line within the city of Hamilton will run through G.T.R. property. The Hamilton Parks Board and Finance Committee approved the by-law in Sept., 1907, which calls for the completion of the line to Galt by the end of 1909, and to Guelph a year later. In the event of any unforeseen delay, an extension of a year will be granted, provided the company can show that it has expended $100,000 on construction. Six trips each way, between Hamilton, Galt and Guelph, are to be run daily, the fares to be at 2c. a mile single, and 1¾c. return. It is also provided that any other company may use the

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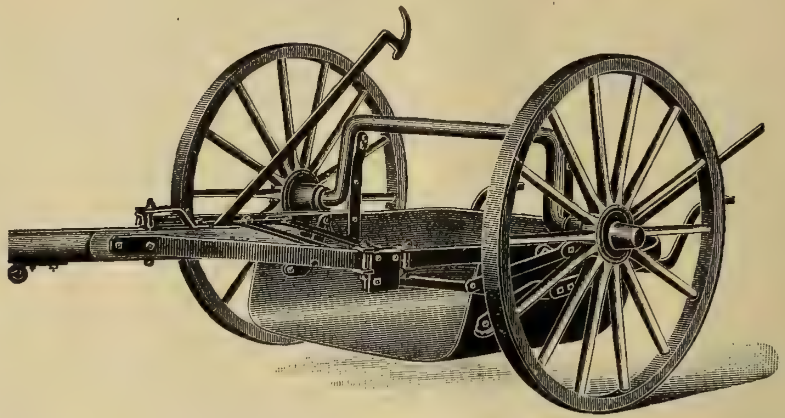

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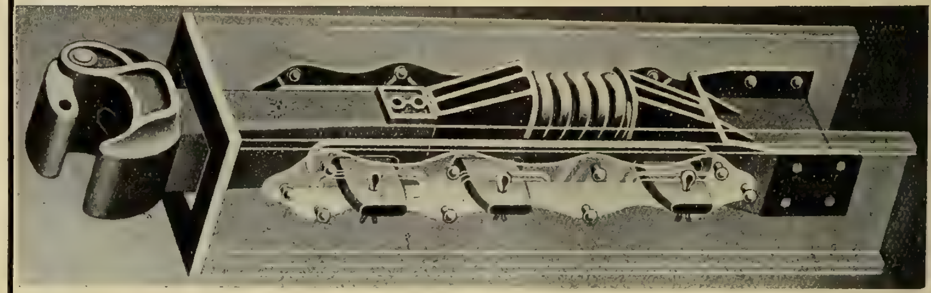

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right-of-way within the Hamilton boundaries, on terms to be fixed by the Board of Railway Commissioners. (Oct., 1907, pg. 761.)

Montreal Park and Island Ry.—During the year, considerable extensions and betterments will be made on this line.

Montreal St. Ry.—It is understood that, among the extensions proposed, is that of the Back River line eastward, to Bout de l'Isle, where connection will be made with the Terminal system.

The question of the transit of freight over the Street Railway is again to the fore, and strong representations are being made to the new council by business men, in favor of the scheme.

Mount McKay and Kakabeka Falls Ry.—At a sitting of the Board of Railway Commissioners at Fort William recently, application was made for permission to cross the C.P.R., C.N.R., and G.T. Pacific Ry. tracks. The electric railway company desire to cross on the level, but the steam railway companies urged that permission only be granted to cross by either a bridge, or a subway. Judgment was reserved.

North Midland Ry.—A. E. Welch, London, Ont., stated recently that surveying on this line between London and Stratford had been commenced, and that two surveys would be made, one via Thorndale, and one via Bryanston. He estimated that nearly $70,000, including the cost of erecting two bridges at London and Devizes, would be saved by adopting the former route. (Dec., 1907, pg. 927.)

Ontario West Shore Electric Ry.—Application is being made at the current session of the Ontario Legislature, for power to extend this proposed line from at or near Grand Bend, Stephen tp., through Usborne, southeasterly through Blanchard, and Biddulph, thence southerly and westerly through West Nissouri or London tp. to London; also to construct a branch line from Usborne, or Blanshard, through Blanshard, easterly to St. Mary's, thence through Downie to Stratford; and also into and through Kincardine. (Dec., 1907, pg. 927.)

The Ottawa Electric Ry. Co. has under consideration the construction of an extension of its line from Broad St. to the Experimental Farm, about two miles; and an extension of about half a mile of the George St. loop.

Quebec and Saguenay Ry.—Press reports say that construction will be commenced in the spring on the proposed line from St. Joachim, the terminus of the Quebec Ry., Light and Power Co.'s line, 30 miles east of Quebec, to St. Catharines Bay. The location of the line to Murray Bay, 56 miles, has been completed, and it is stated that the road could be completed within a year, as no engineering difficulties would be encountered. (Aug., 1907, pg. 603.)

The Sarnia Street Ry. Co. has arranged to construct an extension from Wellington St. to River Road, 1.25 miles. The work will be done by the company itself, and contracts have been placed for all the material required.

Southwestern Traction Co.—A bill has been introduced in the House of Commons providing for the extension of the time for the commencement and completion of construction of the company's proposed line between London and Ingersoll, Ont.

The Sydney and Glace Bay Ry. Co. is building a power house 75 by 50 ft., contract for which has been let to Rhodes, Curry & Co., Amherst, N.S. The equipment to be provided will consist of three return tubular boilers and one vertical engine, of 300 h.p., by the Robb Engineering Co., Amherst; one 200 h.p. engine, one 250 k.w. railway generator, and one 150 k.w. Westinghouse railway generator.

Toronto Ry.—During 1907, the company laid in all about two miles of additional tracks. All the principal intersections throughout the city have been renewed with special work of heavy manganese steel.

The city council is making application to the Ontario Legislature for power to enable it, without submitting the proposal to a public vote, to pass a by-law, authorizing the issue of debentures to raise $135,000, for the cost of bridges, grading, re-paving, and purchase of land, necessary for the proposed extension of the street railway through the garrison common to the exhibition grounds; and to utilize a portion of the revenues derived from the Toronto Ry., to lay permanent paving for the railway tracks through the common.

Vancouver, B.C.—A press report states that an application is to be made shortly for a charter to build and operate a street railway at Point Grey, and that construction will be proceeded with immediately the charter is granted.

Western Central Ry.—An act is under consideration at the current session of the Ontario Legislature granting an extension of time for the commencement and completion of this projected railway. Authority is also being asked to enable the company to guarantee the bonds—as to principal or interest, or both—of any company authorized to carry on any business incidental to the working of a railway.

Electric Ry. Finance, Meetings, Etc.

Cape Breton Electric Co.—Gross earnings for 12 months ended Dec. 31, 1907, $250,064.67; operating expenses, including taxes, $157,048.12; net earnings, $93,016.55; interest charges, $42,862.30; improvement fund, $8,650.00; dividends, 6% preferred stock; $14,040.00; surplus, $27,464.25; against, $258,416.80, gross earnings; $154,472.28, operating expenses; $103,944.52, net earnings; $43,160.97, interest charges; $7,020 dividends. $45,263.55, surplus for 1906. The company is responsible for the lighting and electric railway service in Sydney, N.S., the lighting in North Sydney, the ferry business between these points, and operates an interurban line between North Sydney and Sydney Mines. It owns $200,000 of the $391,000 outstanding first mortgage bonds, and $250,000 of the $500,000 capital stock of the Sydney and Glace Bay Ry., and half of the earnings and operating expenses of this railway are included in the figures above quoted. The company is authorized to issue $1,500,000 first mortgage 5% gold bonds, due Jan. 1, 1932, of which $850,000 are outstanding, has an authorized capital stock of $2,000,000 by charter, and preferred stock of $250,000 by stockholders, of which $1,000,000 and $234,000 are issued, respectively. The company is managed by Stone & Webster, Boston, Mass., A. F. Townsend being the local manager at Sydney.

Dominion Power and Transmission Co.—The following directors were elected at the annual meeting in Hamilton, Ont., recently: J. M. Gibson, J. Dixon, J. Knox, Col. J. R. Moodie, W. C. Hawkins, S. O. Greening, J. W. Sutherland, L. Harris, and A. Cooke.

Halifax Electric Tramway Co.—The following directors were elected at the annual meeting, Feb. 10: Hon. D. MacKeen, J. Y. Payzant, W. B. Ross, J. Hutchison, A. Kingman, J. C. Mackintosh, H. S. Poole, C. C. Blackadar, F. B. McCurdy.

Receipts for Jan., $12,920.09; against $12,387.76 for Jan., 1907.

Hamilton St. Ry.—The proposal submitted to the city council for a renewal and betterment of the street railway system, provides that the city shall receive during the next five years, sums equal to the amount paid as percentage on earnings for last year, to be increased by $1,500 a year for the following five years, by $2,000 a year for a third period of five years, and by $2,500 a year for the last five years of the present franchise term. On its part, the company will add new up-to-date cars to its equipment at the rate of 10 each year, lay a new roadbed, and extend its lines in the northern parts of the city. The terms are under consideration, but have not as yet been favorably received by the council.

The receipts for 1907 were $316,739, an increase of $66,941 over 1906. The amount paid to the city, being 8% of the receipts and a mileage payment, was $32,858.

Hamilton, Waterloo and Guelph Ry.—A press report states that J. Patterson, the chief promoter of the proposed railway between Hamilton and Guelph, has gone to England regarding the financing of the project.

London St. Ry.—Regarding the proposed purchase of the street railway by the city, the Mayor recently announced that nothing had been done. Investigations were being made to see if it would be in the city's interest to acquire the system, but it is generally understood that the city's finances are not in the condition necessary for the consummation of the deal.

Montreal St. Ry.—The recent issue of $2,300,000 in 14-year debenture bonds at 4½%, which was authorized at a special general meeting Jan. 29, was successfully floated in London, Eng., it being considerably over-subscribed on the day of issue. Of the amount realized, $300,000 will be applied to retiring the bonds due May 1, and the company's floating debt, which stands at $1,800,000, will be dealt with.

Passenger earnings for Jan., $280,437.05; miscellaneous earnings, $5,078.31; total, $285,515.36; operating expenses, $202,503.94; net earnings, $83,011.42; city percentage on earnings, $14,756.41; interest on bonds and loans, $16,732.41; contingent for renewals, $14,021.85; rent leased lines, $444.43; surplus, $37,056.32; against $266,963.55 passenger earnings; $4,992.87 miscellaneous earnings; $271,956.42 total; $189,497.60 operating expenses; $82,458.82 net earnings; $12,844.92 city percentage on earnings; $13,382.43 interest on bonds and loans; $13,597.82 contingent for renewals; $339.96 rent leased lines; $42,293.69 surplus for Jan., 1907. Total earnings for four months ended Jan. 31, $1,188,238.38; operating expenses, $742,026.88; net earnings, $446,211.50; city percentage on earnings, $47,094.11; standing charges, $126,723.86; surplus, $272,393.53; against, $1,083,992.44 total earnings; $705,920.60 operating expenses; $378,071.84 net earnings; $40,711.50 city percentage on earnings; $118,461.86 standing charges; and $218,898.48 surplus for same period 1906-07.

Ontario West Shore Electric Ry.—A meeting of shareholders is called for Mar. 23, for the purpose of electing directors, to issue bonds, debentures or other securities to the extent of $15,000 a mile of single track of the railway, extension and branches, and to secure same by mortgage deeds. Cameron & Killoran, Goderich, Ont., are acting for the company.

St. Thomas (Ont.) St. Ry.—Receipts for Jan., $1,180.49, against $995.71 for Jan., 1907.

Toronto Ry.—Car earnings for Jan., $269,325.29, against $254,812.52 for Jan., 1907.

Windsor, Essex and Lake Shore Rapid Ry.—The shareholders are being asked to authorize the issue of bonds amounting to

$750,000, at par, and the procuring of $60,000 for the completion of the railway to Leamington, Ont., and for power to issue bonds, debentures or other securities to parties who have made, or may make, advances for the benefit of the company, as a security for such advances, and to give mortgage deeds on the property and general assets of the company. It is also sought to reduce the number of directors from 9 to 7.

Winnipeg Electric St. Ry.—The annual meeting was held at Winnipeg, Feb. 12, when the annual report was presented, and the retiring directors re-elected for the current year. The street railway earnings from fares were $861,857.42, against $727,726.00 for 1906. The full statement has not yet been issued.

Electric Railway Notes.

The Sarnia St. Ry. Co. is arranging to add some additional cars to its rolling stock.

C. W. Graves has been appointed District Passenger Agent, Niagara Gorge Ry., at Toronto.

The Winnipeg Board of Control has decided to order that wheel guards be placed on all the street cars.

The Toronto Ry. Co. is understood to be building another 25 cars, preparatory to the introduction of the "pay-as-you-enter" system.

The Toronto Ry. Co. recently shipped six single-truck open motor cars to Monterey, Mexico, and also a similar number to Winnipeg.

The C.P.R. has commenced proceedings against the Grand Valley Ry., to recover $3,104.70, the value of a number of ties delivered to the G.V.R. at Drumbo, Ont.

The recent charge against N. M. Cantin, promoter of the St. Joseph and Stratford Electric Railway scheme, for obtaining cash and bonds by false pretences, was dismissed at Toronto.

The Ontario Railway and Municipal Board has approved the freight tariff of the South-Western Traction Co., and the Sandwich, Windsor and Amherstburg Ry., subject to a general enquiry as to freight tariffs.

The body of the late S. F. Kilgore, President of the Huron and Ontario Ry., who died in London, Eng., Jan. 24, while engaged on the company's business, was brought to Toronto for interment, the funeral taking place Feb. 8.

The Quebec Railway, Light and Power Co. has ordered 11 motor cars for its city division. Five will be closed 18-ft. vestibule cars, and 6 open cars. Each car will be equipped with two 12a Westinghouse motors and 28a controllers.

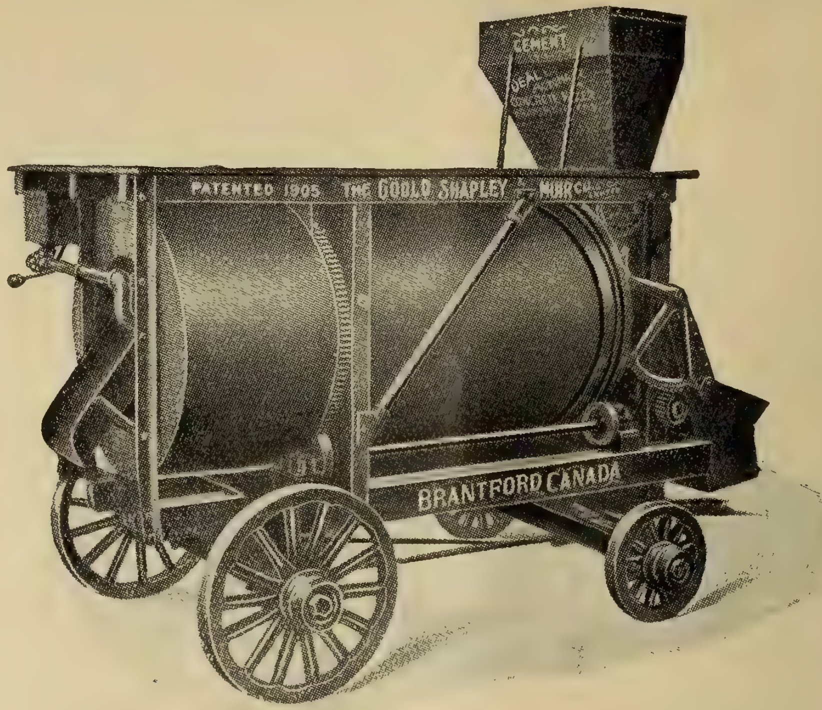
The arbitration board to investigate the differences between the Hamilton St. Ry. and its employes, consists of Prof. A. Shortt, Chairman; W. Bell, K.C., for the street railway, and J. G. O'Donoghue, representing the railwaymen's union.

The B.C. Electric Ry. Co. is trying a fender on its cars at Vancouver which, though it has not been utilized in Canada, is said to have proved successful in Great Britain, and has been sanctioned by the British Board of Trade

The Montreal St. Ry. has complained to the city as to the manner in which snow is removed from the streets. The company does not object to pay its due share of the legitimate cost, but considers the removal is not conducted on economical lines

The Toronto Board of Control passed a motion, Feb. 19, asking the Ontario Railway and Municipal Board to compel the Toronto Ry. to put an approved type of fender on its cars. The Board has ap-

BRANTFORD CONCRETE MIXER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proved of two makes of fenders for the Toronto street service.

The Winnipeg, Selkirk and Lake Winnipeg Ry. Co. has offered to supply light and power to Selkirk, at the rate of 10c. per thousand k.w., with discount of 10% and upwards, according to amount used, for light and from 1c. upwards per horse power, according to distance from the station, for power.

The shareholders of Bruce, Peebles & Co., contractors, met in Edinburgh, Scotland, Feb. 15, to appoint a liquidator, and to consider the question of re-organization. This firm built the South-Western Traction Co.'s line in Ontario, and also was responsible for large street railway works in Moscow, Russia, and Athens, Greece.

The application of the Chippewa and Niagara Falls Boards of Trade was heard by the Queen Victoria Niagara Falls Park Commissioners, Feb. 15, regarding a reduction of cash fares from 10c. to 5c. on the Niagara Falls Park and River Ry. The arguments were not concluded when the Commissioners rose, and the matter was adjourned to Feb. 29.

An application as recently made to the Ontario Railway and Municipal Board for leave to proceed against the Port Arthur St. Ry., for a breach of the Lord's Day Act, in running its cars on Sundays. The town of Port Arthur, which owns the railway, was unsuccessful in its attempt to obtain legislation on this point some time ago, but has been running its cars without it.

The case of Toronto Junction against the Toronto Ry. Co. regarding the question of running cars from Humberside to Keele St., Toronto Junction, before the Ontario Railway and Municipal Board, has been adjourned to May 12. The railway company will run its cars to Keele St. in accordance with the interim order recently granted, pending the decision of the case.

A bill to amend the Municipal Act in regard to the running of street cars on Sundays, was read a first time in the Manitoba Legislature recently. It specifically applies to Kildonan, and provides that the section of the act shall not apply to that district, if the right to operate the cars on Sundays shall be given by a vote of three-fifths of duly qualified electors who actually vote.

Hon. J. S. Hendrie has introduced in the Ontario Legislature a bill to amend the Ontario Railway and Municipal Board act of 1906, to give power to the Board to determine any dispute arising between a railway company and a municipality as to the location of rails in any street or highway; to apportion the cost of repaving consequent upon the relaying of rails, and to control the heating and lighting of the cars, the use of open and closed cars, the height of steps, and the type of seat and brakes to be used. He also introduced a bill to provide that in cases where electric railways are diverted from the highways, cattleguards shall be erected at the points of diversion, and also that the Board may order the erection of a fence between the railway and the highway, by either the company or the municipality.

◆

Replying to a question in the House of Commons asked by R. Blain (Peel County) the Premier said the revenue for the nine months ended Mar. 25, 1907 (which constitutes the last fiscal year, under the new system), from wharves, piers and harbors had been:

Ontario	$2,844.27
Quebec	3,125.26
Nova Scotia	3,876.63
New Brunswick	1,995.85
Prince Edward Island	1,001.90
British Columbia	262.00
Total	$13,105.91

B C. Electric Railway Co.'s Report.

Following are extracts from the directors' report for the year ended June 30, 1907: "The business shows continued and increasing prosperity in all departments, and the directors are pleased to be able to recommend a further increase in dividend, which will place the deferred ordinary stock on an 8% basis, and, consequently, the preferred ordinary stock on a 6% basis. For the 12 months to June 30, 1907, the gross receipts show an increase over those of the preceding year of $329,204, and the net earnings, including income from investments in subsidiaries, after charging renewals, show an increase of $186,251. The following charges have been made against the revenue account of the year, viz.:

	£	s.	d.	£	s.	d.
Provision for renewals maintenance (from which £8,567 18s. 11d. has been deducted for adjustments and expenditure on renewals during the year)				26,160	12	5
Bonus to employes				5,702	9	6
Amount added to capital amortization				1,865	16	9
Net profit for year, after making above deductions				105,012	17	10
Add balance brought forward from last year				2,619	7	8
				£107,632	5	6
Deduct—						
Interest on debentures and debenture stock to June 30, 1907	23,775	0	3			
Interim dividends—						
On 5% cumulative perpetual preference stock for 6 months to Dec. 31, 1906	7,500	0	0			
On preferred ordinary stock for 9 months to Mar. 31, 1907	11,250	0	0			
On deferred ordinary stock for 6 months to Dec. 31, 1906	14,000	0	0			
				56,525	0	3
Leaving available for distribution and reserves				£51,107	5	3
From this the directors have decided—						
To transfer to reserve fund	18,876	5	9			
To provide for dividend on cumulative perpetual preference stock for 6 months to June 30, 1907	7,500	0	0			
To provide for dividend on preferred ordinary stock at 5% per annum for 3 months to June 30, 1907	3,750	0	0			
* To recommend payment of additional dividend on preferred ordinary stock at 1% per annum for 6 months to June 30, 1907	1,500	0	0			
To recommend payment of dividend on deferred ordinary stock at 8% per annum for 6 months to June 30, 1907, making 7½% for the year	16,000	0	0			
				47,626	5	9
To carry forward to next account				£ 3,480	19	6

*The Preferred Ordinary Stock is entitled to participate ratably with the Deferred Ordinary Stock in profits distributed as dividends after the Deferred Ordinary Stock has received a dividend of 7% and, consequently, the Preferred Ordinary Stock will receive an extra dividend for the six months ended 30th June, 1907, at the rate of 1% per annum, which will be paid with the next half-yearly dividend on November 30.

The reserve fund has also been credited with £4,123 14s. 3d., being the estimated value of certain bonus lands in North Vancouver now being utilized by the company. The number of lights in use at June 30, 1907, was 216,786, an increase of 49,456 over June 30, 1906. The number of passengers carried during the year was 16,281,766, an increase of 3,886,184. During the year £140,855 7s. 9d. has been spent in extensions and improvement of the property and equipment. The North Vancouver extension is in active operation, and there is every indication that it will prove a valuable adjunct to the system. The Vancouver Power installation continues to work satisfactorily. To meet increased demands, an additional unit is now being installed, which will bring up the capacity of the plant to 22,000 horse-power. Further extensions and improvements have been made in the plant and equipment of the Vancouver and Victoria Gas Companies with satisfactory results. Hon. M. R. Gifford is now in British Columbia on a visit of inspection, and the Managing Director will proceed there in the spring. The directors have much pleasure in recording their appreciation of the services of the General Manager, R. H. Sperling, and the staff in British Columbia, and their satisfaction with the excellent relations which continue to exist between the company and its employes. An agreement has recently been made with the employes, settling a revised wages schedule for the next three years. The share of profits for the past year distributed among the employes was $27,342. During the year an issue of £300,000 4¼% perpetual consolidated debenture stock has been made in order to provide funds for general requirements, and, in particular, for the construction of a line from New Westminster to Chilliwack, a distance of 60 miles. Construction work on the Chilliwack line has been commenced.

REVENUE ACCOUNT.

	£	s.	d.
Gross earnings	299,107	8	5
Sales of bonus land and sundry receipts	3,081	11	10
	£302,189	0	3

	£	s.	d.
Balance brought down	117,112	4	3
Interest of loans and dividends on investments (less interest payable)	23,286	9	7
Registration fees	85	12	6
	£140,484	6	4

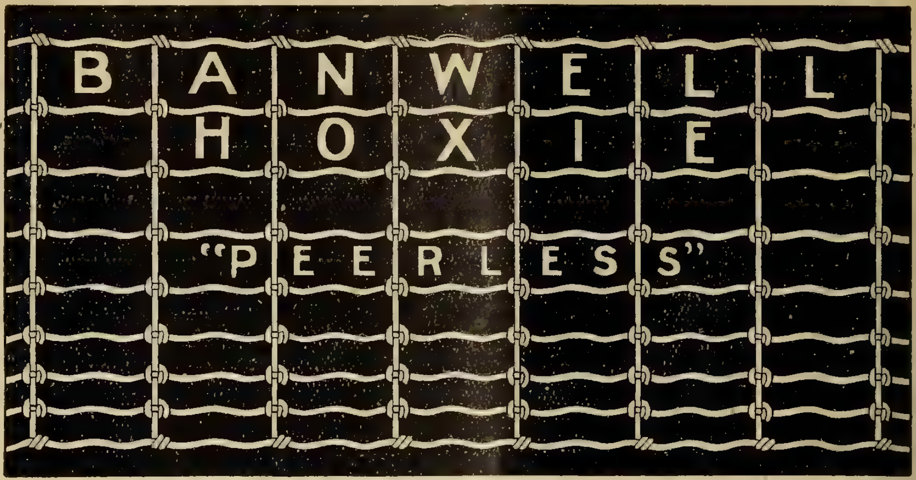
	£	s.	d.
By balance	105,012	17	10
Brought forward from last year	2,619	7	8
	£107,632	5	6

	£	s.	d.
Operating expenses	158,916	3	7
Renewals, maintenance	26,160	12	5
Balance— Carried down	117,112	4	3
	£302,189	0	3

	£	s.	d.
Managing Director's salary, directors' fees and percentage in accordance with articles of association	4,835	17	6
Office rent and salaries, printing and stationery, advertising, general, legal, travelling, audit and agency expenses	2,764	14	3
Trustees' fees	502	11	3
Premium on redemption of 60 debentures of £40 each	120	0	0
Bonus to employes	5,702	9	6
Capital amortization fund	1,865	16	9
New issue expenses	19,679	19	3
Balance	105,012	17	10
	£140,484	6	4

	£	s.	d.
Interest on first mortgage debentures	10,687	10	3
Interest on Vancouver power debentures	9,900	0	0
Interest on 4¼% perpetual consolidated debenture stock	3,187	10	0
Balance carried to balance sheet	83,857	5	3
	£107,632	5	6

R. M. Horne-Payne, chairman of the company, who presided at the annual meeting in London, Eng., recently said: "For the tenth time in succession we have the pleasure of submitting to you a very satisfactory report and balance-sheet for the year. We may congratulate ourselves particularly on two points—that we are able to recommend to you an increase in dividend, which places the deferred ordinary stock on an 8% and the preferred ordinary on a 6% basis, and that at a moment of unparalleled financial stringency, when money is being sought for on almost any terms, however extravagant, by the foresight of your directors your company is able to show cash and other liquid assets to the extent of over £180,000. Although I think that in view of what has occurred during the past year throughout Great Britain, and to a less extent in Eastern Canada and the Eastern United States, we may look upon the fetish of municipal ownership as being quite dead, and I think that ratepayers all over the world clearly understand that municipal ownership almost invariably means extravagance and corruption, fat offices for aldermen and councillors, and unbearable rates for the rest of the population, I would like to state a few facts for the instruction of anybody in British Columbia who is still inclined to listen to agitators on this subject. From time to time during the past few years one has heard outcries against the Montreal Electric Co. for paying 10% on its shares at the expense of the public, and similarly against the Ottawa, Toronto, Winnipeg, and all other successful companies, and now, no doubt, the same cry will be raised against us. These people who raise this outcry always fail to mention that it is on a very small portion of the capital that the higher dividend is paid. In our case it is on less than 4-15ths of the total money raised and expended in the enterprise, the bulk of the money still returning only a fraction more than 4½%. I have been analyzing our results year by year, and applying the total amount paid out as dividend and interest to the total amount of the actual cash investment year by year. From 1898 to 1902 inclusive, we returned less than 4½% per annum on the money actually put into the enterprise. In 1903 our investment yielded 4.8%. In 1904 5.1%, in 1905 5.2%, in 1906 5.1%, and this year, including our 8% dividend, the return on the actual cash invested is 5.564%. It must be apparent, I think, to the most ordinary intelligence that an enterprise can be run by a board of directors who are enabled to carry out a continuous policy from year to year, and from decade to decade, more economically and far more advantageously to the public they serve than by a body of men, however able, who are constantly changing from year to year. The former are able, for instance, to plant their extensions, always provided they are not handicapped by short franchises, for years ahead, in such a way as to best meet the requirements of a growing city, and to assist and nurse its industries and its best interests. The board of the B.C. Electric Railway have adopted already in a general way a comprehensive scheme spread over the next three years. On the other hand, we have again and again witnessed instances of successive councils inclining to rival scientific systems, which has involved the tearing-out and destruction by the one year's council of costly installations put in by its predecessor. Another point at which the municipal officials are at a great disadvantage is that of finance. The cities of Vancouver and Victoria and New Westminster have for the past ten years been represented by a succession of exceptionally able mayors. Even if we have not agreed with them all, we have admired them all for their unquestionable honesty of purpose; but be a man as able as you please, if he be not brought up to finance in one of the great money centres of the world, I can conceive no more pitiable plight than to be suddenly called upon to raise several hundred thousand pounds yearly, and to raise it promptly, to meet the needs of ever-growing cities like those we serve, and to raise it in addition to the ordinary municipal requirements. Such a man must necessarily be a catspaw at the mercy of the financiers of London and New York, and when we consider that several of the greatest cities in the United States and Great Britain have during the past few years completely failed to raise money at 4½% to 5%, it is obvious that smaller cities will in the future have to pay a return of a good deal more than our 5.564% for large sums of money. I for one believe the days of cheap money for municipalities are gone, once and for all, and I think that in the near future the



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Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00 " "
Map No. 5—Calgary District	8.00 to 10.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—Range 11 West, 4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan and Eastern Alberta, 3rd Meridian to Range 10 West, 4th Meridian	10.00 to 25.00 per acre.

All prices are subject to change without notice.

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160	Acres at $	8.00	per acre,	cash payment	$191.70	first	year's	interest	$65.28	and nine	instalments of	$160.00
"	"	9.00	"	"	215.70	"	"	"	73.46	"	"	180.00
"	"	10.00	"	"	239.70	"	"	"	81.62	"	"	200.00
"	"	11.00	"	"	263.60	"	"	"	89.78	"	"	220.00
"	"	12.00	"	"	287.60	"	"	"	97.96	"	"	240.00
"	"	13.00	"	"	311.55	"	"	"	106.10	"	"	260.00
"	"	14.00	"	"	335.60	"	"	"	114.32	"	"	280.00
	"	15.00	"	"	359.50	"	"	"	122.44	"	"	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg

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F. T. GRIFFIN, Land Commissioner, Winnipeg.

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embarrassments of municipalities will prove a serious menace to finance, and that large sums of money will be lost in municipal securities during the next ten years.

Reverting to my remark as to the large amount of cash which this company has on deposit, I should like to point out that whilst money has been scarce in Canada, as in other places, no serious crisis has arisen, and the troubles of her great neighbor have been reflected only by the temporary difficulties of a few men in Montreal and Toronto who have been caught speculating in New York. I think Canadians may well point to this with pride and with great satisfaction, and that we who are interested more or less directly in Canadian finance should feel and express a debt of gratitude to the wise heads—the presidents, vice-presidents, and general managers of the great Canadian banks—whose foresight and strength of character have produced such results. Returning to more general subjects, I am glad to report that the prospects of Canada in general, and in British Columbia in particular, have never been brighter. Because Canada has not gone ahead quite so rapidly as during the previous year, many people have become disheartened, and inclined to show a lack of confidence in the country. The fact is beyond all doubt that to-day Canada is one of the most prosperous—possibly the most prosperous country in the world—and if the march of prosperity stopped for a few months, it has been but for Canada's greater good, it has prevented a speculative boom which might have been disastrous, and it has stopped but to gain force for still greater forward strides. In British Columbia the tide of progress has not hesitated; on the contrary, it seems to be but just beginning. A great movement of rich emigrants set in this summer, and will be renewed next spring. These emigrants are chiefly come from the prairies, and consist of the old-timers who, having made money, are attracted by the more genial climate and beautiful surroundings of British Columbia to seek homes there. In 1901 we were serving altogether a white population of about 75,000. To-day we are probably serving some 150,000, and personally I have not the least doubt that in ten years' time we shall have a white population of between 300,000 and 400,000 to provide for. I see nothing but success and prosperity before the country and our company."

The retiring directors, R. M. Horne-Payne and G. P. Norton, were re-elected.

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Toronto Railway Company's Report.

Following are extracts from the report for the year 1907: "Your directors feel that the shareholders are to be congratulated on the result of the past year's operations. Both the gross and the net earnings show very gratifying and satisfactory increases over those of the preceding year. A resumé of reports and statements dealing with 1907 shows the following results:

Gross earnings		$3,511,197.86
Operating expenses		1,893,236.41
Net earnings		$1,617,961.45
DEDUCT FIXED CHARGES.		
Payments to city:		
Percentage on earnings	$ 419,606.91	
Pavement charges	80,994.33	
Interest on bonds, etc.	221,201.24	
		721,802.48
Surplus		$ 896,158.97
Deduct four quarterly dividends of 1½% each		473,378.31
Net surplus after payment of all fixed charges and dividends		$ 422,780.66

APPROPRIATED AS FOLLOWS.

Transferred to contingent account	$ 125,000.00
Balance carried forward to profit and loss account	297,780.66
	$ 422,780.66

"The gross earnings have increased from $3,109,739.61 in 1906 to $3,511,197.86, or 12.9%. The operating expenses for the year were $1,893,236.41, or 53.9% of the gross earnings, as compared with 52.9% in 1906. This increase is due very materially to an advance in wages granted the greater number of our employes in June last, and representing a pro rata increase of 10% over the wages bill of a year ago. The increase in net earnings is $154,737.11, or 10.6%. Fixed charges, which include bond interest and payments to the city, have increased $74,673.80, due chiefly to increased percentages paid to the city, on greater earnings.

"During the year the city received from the company for taxes, percentages and pavement charges, $542,090.53, an increase of $74,725.09 over 1906. Continuing the policy established some few years ago, the directors have charged to contingent account during the year $167,461.70. This, in addition to an allowance for depreciation on the properties, represents extraordinary repairs and renewals (not properly chargeable to betterments) of several miles of track, on King, Queen, Yonge and College Streets. The system has been greatly improved by the reconstruction of this track now laid with 90-lb. girder rail and best heavy manganese steel intersections. $536,388.12 has been expended during the year for extensions, additions and betterments (not properly chargeable to repairs or renewals), chiefly as follows: In securing lands and properties deemed advisable for the purpose of providing adequately for the company's future growth; in continuing the installation of underground cable connecting the several sub-stations and power house; in completing the 40 ft. double truck convertible cars, mentioned in last year's report, and the first lot of the 100 new type pay-as-you-enter cars. In track extensions on Roncesvalles Avenue, and at Scarboro Beach.

"The properties have been maintained in excellent physical condition, and substantial improvements and betterments have been made.

"Your directors have considered that to exercise the company's power to build new lines without the concurrence of the City Council would antagonize public opinion, and comparatively few extensions have been made on account of the opposition developed by the Council to proposed new routes; notwithstanding the fact that new lines have been ordered to be constructed by the Ontario Railway and Municipal Board, and the routes suggested by the company have been recommended by the City Engineer and endorsed by the special expert engaged by the city to report upon the matter. The directors have persistently urged the Council to co-operate with them in endeavoring to provide for the growing demands of the citizens. Everything practicable is being done to improve our service to the public, and your directors hope that substantial progress will be made during the present year. The shareholders are to be congratulated upon the termination of the long drawn out litigation with the city. During the year the litigation, popularly known as the omnibus and Avenue Road cases, which involved questions vital to the company's interest upon the interpretation of the franchise agreement, was brought to a conclusion by the decision of the Privy Council. The result was a complete victory for the company on all points. The legal department has had a particularly successful year in cases arising from injuries and damages claims, having won 15 out of 22 cases tried in the High Court.

"In July last the Jackson's Point extension of the Toronto and York Radial Ry. was opened to traffic, and the results were most gratifying. The company now operates a total of 78 miles. The gross earnings of the system for the year were $282,143.93, against $221,450.17, in 1906. The operating expenses were $176,403.58, against $138,492.29. After paying the fixed charges there remains a surplus of $32,893.17. The express goods business is as yet practically confined to that portion of the Metropolitan Division between Toronto and Newmarket, about 28 miles, and from this service $33,895.76 was earned. It is the intention to extend the express goods service to Sutton West in the early spring, and as a large part of this new territory is without steam railway facilities, the company should have a remunerative traffic from this division."

The number of passengers carried in 1907 was 85,574,788, against 76,958,488 in 1906. The transfers issued in 1907 were 31,370,825, against 28,159,558 in 1906.

ASSETS.

Road and equipment, real estate and buildings, including pavements, etc.	$13,541,020.06
Stores in hand	363,674.02
Accounts receivable	511,308.55
Cash in bank	205,654.27
	$14,621,656.90

LIABILITIES.

Capital stock		$ 8,000,000.00
Bonds—4½% sterling	$2,030,373.33	
4½% currency	983,000.00	
6% debentures	600,000.00	
		3,613,373.33
Injuries and damages Insurance Fund	$ 21,405.56	
Mortgages	70,775.00	
'Accounts and wages payable	142,799.92	
Accrued interest on bonds	63,699.90	
Unredeemed tickets	66,629.55	
Bills payable	137,160.10	
Dividend payable Jan. 2	119,786.15	
Contingent account	117,593.47	
		739,849.65
Profit and loss as at Dec. 31, 1906	$1,970,653.26	
Balance surplus	297,780.66	
		2,268,433.92
		$14,621,656.90

TORONTO AND YORK RADIAL RAILWAY CO.
INCOME ACCOUNT.

		1907
Gross earnings		$ 282,143.93
Operating expenses		176,403.58
Net earnings		$ 105,740.35
Bond interest		
Taxes		
		72,847.18
Net profit		$ 32,893.17

The report was adopted at the annual meeting Feb. 5. The officers and directors for the current year, all of whom were re-elected, are: President, Wm. Mackenzie; Vice-President, F. Nicholls; other directors, Hon. G. A. Cox, Sir Henry M. Pellatt, W. D. Matthews, R. Forget, J. Gunn.

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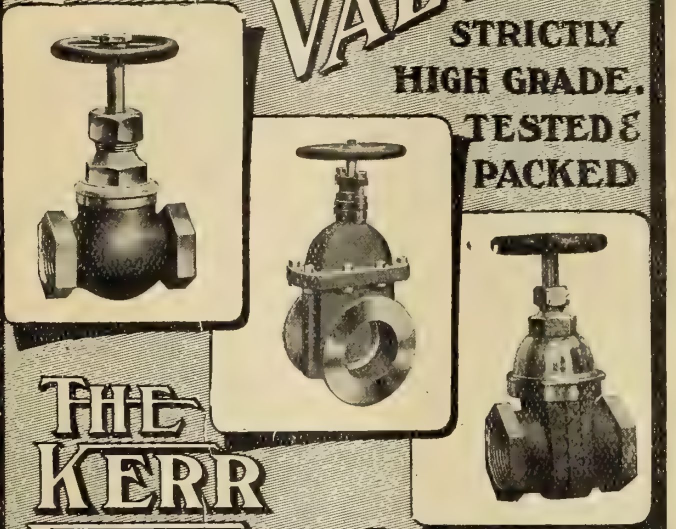
Quebec Ry., Light and Power Co.

Following are extracts from the directors' report for the year ended June 30, 1907: "The net profits were $84,355.75 which, added to the balance of profit and loss account from the previous year, together with $4,840.00, premium on preferred stock sold during the year, brings amount at credit of this account to $387,819.72. From it, $40,000 has been placed to credit of contingent account and the balance, $347,819.72, placed to the credit of surplus account. The year has been a fairly prosperous one. The several divisions of the company's operations have shown substantial increases over those of the previous year, but the cost of operation has also increased owing to high wages, increased cost of material and interest charges. During the past two years $251,830.70 has been paid on account of the new dam, power-house and machinery. The works are nearing completion, and the whole plant will be in operation by Jan. 1, 1908. It is confidently expected that the results to be obtained from this source will add largely to the company's future profits. The considera-



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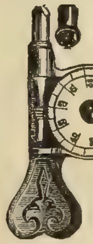

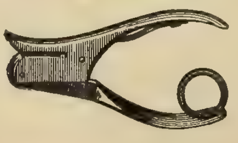

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tion of a more economical system of transmitting the electrical current from Montmorency to Quebec became necessary, owing to the approaching completion of the new dam and power-house, and the work is being carried out. The current will be transmitted at a higher voltage and a considerable saving effected over the present system, and the risk from fire largely decreased. A storage battery plant of 900 h.p. capacity has been installed in connection with the street railway service, at a cost of about $35,000, and has been in operation since May last. The results obtained have been very satisfactory. The contract with the Canadian Electric Light Co. for delivery of 1,000 h.p. expired Feb. 14, 1907. A new contract has been made for a further term of five years. To meet the increasing traffic demands, two locomotives and 25 freight cars were added to the rolling stock of the Montmorency Division. These cars have been constantly employed, and have been found insufficient to meet the requirements, and consequently another contract has been made for the delivery next spring of thirty more flat cars."

Following are extracts from the report of E. A. Evans, General Manager "This being the tenth year of the operation of the Citadel Division, I submit a statement showing gross earnings, operating expenses and other statistics with reference to the same, for each year of its existence, from which it will be noticed that the gross earnings have been more than doubled, while the operating expenses per car mile have been but slightly increased. The operating expenses for the year 1897-98 were 10.96c. per car mile against 12.86 during the past year. The income per capita of population represents only $3.24 a year, an exceedingly small income as compared with other cities; it, however, shows a steady advance from $1.58 the first year, and proves that the public more and more appreciate the service, and also shows that the gross earnings can be very much increased without any considerable increase of operating expenses. The rolling stock of this division consists of 35 closed cars and 34 open cars, of which, during the winter months 33 closed cars are in daily operation, and in summer 31 open and 6 closed cars, thus leaving only three open cars for extra or special purposes, not by any means sufficient to enable the company to properly handle the public on special occasions such as St. Jean Baptiste Day, Labor Day and other public events, besides leaving no spare cars available for private parties, and, in view of the fact that next year will be the tercentenary celebration of the foundation of Quebec, it is absolutely necessary that our rolling stock should be increased by ten more closed cars, with trucks and electrical equipment, and ten more open cars with trucks only. Notwithstanding the fact that over five and a half million passengers have been carried on this division, no fatal nor serious accident of any kind has occurred during the past year. The completion of the storage battery plant of 900 h.p. has already proved to be of very valuable assistance in the operating of this division.

"The Montmorency Division still continues to show marked increases, both in the passenger and freight departments, 1,235,260 passengers were carried during the year, an increase of 123,063 over the previous year. There were also 126 organized pilgrimages to Ste. Anne de Beaupré, as compared with 118 for the previous year. The freight business, which a few years ago was of small proportions, now amounts to 84,897 tons, representing 5,277 carloads of freight, an increase of 23,458 tons and 1,101 carloads over the previous year. This increase necessitated the purchase of 25 additional freight cars and two locomotives. The growing requirements of this part of the company's business still demand more cars, to provide for which a contract has been entered into for delivery of 30 flat cars next April. The Kent House, hotel and park, together with the rustic theatre in connection therewith, are steadily gaining popularity, and as a consequence are a means of very considerably increasing the travel on this division. No fatal nor other accident of any description has occurred on this division during the past year, notwithstanding the fact that the company has been operating an average of 76 trains a day, in and out of our terminal station."

ASSETS.

Road and equipment, real estate, buildings, etc., including Kent House	$5,851,449.54
Cash on hand and in bank	20,583.09
Power division—operating account, including accounts due, stores for operating equipment, etc	48,964 32
Kent House—operating account	9,976.46
Citadel division—operating account, represented by stores on hand	10,521.40
Montmorency division—operating account, stores on hand, cash assets, etc	46,124.95
Accounts receivable	16,839.12
	$6,004,458.88

LIABILITIES.

Capital stock		$2,500,000.00
Bonds		2,500,000.00
Preferred capital stock	$ 500,000.00	
Less in treasury	47,000.00	
		453,000.00
Bills payable		63,358.78
Accrued interest account		25,978.18
Accounts payable and other liabilities		74,302.20
Contingent account		40,000 00
Surplus account		347,819.72
		$6,004,458.88

PROFIT AND LOSS ACCOUNT.

Balance at credit, June 30, 1906		$ 298,623.97
Net earnings to June 30, 1907	$ 232,415.41	
Less interest on bonds, dividends on preferred stock and interest paid and accrued, etc.	148,059.66	
		84,355.75
Premium on preferred stock sold during year ended June 30, 1907		4,840.00
		$387,819.72
Transferred to contingent account		$ 40,000.00
Transferred to surplus account		347,819.72
		$387,819.72

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Ottawa Electric Railway Company.

Following are extracts from the report for the year 1907: "The gross earnings were $574,278.46, compared with $525,746.59 in 1906. The net earnings were $225,349.07. Dividends amounting to 12% were paid. After providing for the interest on bonds and loans, and for mileage payments, the net earnings show over 18% earned on the company's capital stock. 12,623,440 passengers were carried during the year, compared with 11,408,422 in 1906. In order to cover expenditure on capital account during the past few years, your directors decided in Nov. last to issue 2,500 shares of new stock at par pro rata to shareholders. All these shares have been subscribed and will be paid for within the next few months.

"During the year Sussex St. from St. Patrick St. to Government House gate, Gladstone Ave., and Laurier Ave. from Nicholas St. to King St., were relaid with 80-lb. rails, and a second track was laid on Gladstone Ave. The work of relaying the tracks within the city with heavy rails is now almost completed. At the end of Dec. an agreement was reached between the water power owners on both sides of the Ottawa at the Chaudiere for the purchase of the Little Chaudiere water powers and for conserving the waters of the Ottawa River. This will result in an increased and more uniform flow of water, and will be of great benefit to this company's valuable water powers. The company's traffic continues to increase steadily from year to year, and your directors use their best endeavors to keep pace with the development by constantly adding to the rolling stock and in other ways improving the service. Everything points to a very satisfactory year's business in 1908."

ASSETS.

Roadbed and equipment, water power property and plant, real estate and buildings	$2,058,431.22
Stores	5,296.41
Cash	4,899.20
Insurance paid in advance	5,200.00
	$2,073,826.83

LIABILITIES.

Capital stock	$ 998,200.00
First Mortgage, 4% bonds	500,000.00
Dividend payable Jan. 1, 1908	44,806.50
Interest on bonds, payable Jan. 5, 1908	10,000.00
Unpaid dividends	390.67
Pay list to Dec. 31, 1907	11,220.20
Bills payable and interest	216,085.00
Bank of Ottawa	24,058.34
Accounts payable	5,077.24
Contingent account, including balance from 1906	29,000,00
Rest account	200,000.00
Profit and loss	34,988.88
	$2,073,826.83

PROFIT AND LOSS.

Balance at credit Dec. 31, 1906	$ 199,564.46
Net profit for year 1907	225,349.07
	$ 424,913.53
Dividends	$ 119,484.00
Interest on bonds and loans	31,626.40
Mileage payments	12,814.25
Rest account	200,000.00
Contingent account	26,000.00
Balance at credit Dec. 31, 1907	34,988.88
	$ 424,913.53

Following is a comparison of the percentage of operating expenses to receipts: 1899, 57%; 1900, 57%; 1901, 63%; 1902, 60%; 1903, 61.8%; 1904, 62%; 1905, 59.4%; 1906, 57.8%; 1907, 59.8%.

The directors and officers for the current year, all of whom were re-elected, are: President, T. Ahearn; Vice-President, P. Whelen; other directors, G. P. Brophy, Hon. G. A. Cox, W. Y. Soper, T. Workman.

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Grain Elevator Notes.

The North Star Elevator Co.'s elevator at Milestone, Sask., containing 16,000 bush. of grain, was destroyed by fire recently.

The Southern Alberta boards of trade, at a recent joint meeting at Lethbridge, passed a resolution in favor of Government ownership of elevators.

The Northern Elevator Co. will this summer commence the erection of a line of elevators along the G.T. Pacific Ry. between Winnipeg and Saskatoon.

The Ogilvie Milling Co.'s elevator at Winkler, Man., was burned Feb. 7, together with 15,000 bush. of grain. The loss on the elevator alone is estimated at $6,000.

Grain receipts at Port Colborne, Ont., during the past season amounted to 1,669,135 bush., an increase of 173,697 over the previous year, notwithstanding that none was received during April and Dec., 1907.

For the five months ended Jan. 31, the amount of grain received at the elevators at the head of the lakes, from points in Manitoba, Saskatchewan and Alberta, was 36,665,699 bush., against 34,629,480 bush. for the same period 1906-07.

Application has been made to the London, Ont., City Council, controlling the London and Port Stanley Ry., by N. R. Price, for the lease of certain lots at Port Stanley, upon which to erect a large grain elevator. During 1907, the company which Mr. Price represents handled 750,000 bush. of wheat, all of which was handled over the L. and P.S. Ry., and distributed between Essex and Ayr, Ont., and it is stated that if the company had two or three times its present elevator capacity the business would be forthcoming. The wheat trade at Port Stanley is a new branch of business.

The Ogilvie Elevator at Fort William.

A new elevator has been erected by the Ogilvie Flour Mills Co. at Fort William, Ont., to replace the one which toppled over, by the slipping of the whole structure from some unexplained cause, May 26, 1906. After an examination of the collapsed structure it was decided to move the site of the building inland about 135 ft. from the river, and in this new location the elevator has been rebuilt, and connected with the river by means of shipping galleries. The ground level and track grade of the new location is approximately 18 ft. above the basement floor of the previous site. The excavations for the new site, however, have been made deep enough to bring the basement floor on the same level as the original building. This gives a head room of something like 18 ft. under the track grade. The tracks serving the elevator have been graded up an additional three ft., giving a total of about 21 ft. of a basement under the tracks. In this deep basement the scale hoppers are located immediately under the tracks, so that all cars are unloaded directly into the scale hoppers and the weights recorded on the scale beams, which are also located on the track floor. This arrangement obviated the necessity of carrying the cupola higher than was necessary for the elevator heads, spouting and distributing conveyors, and reduced the total height of the building something about 30 ft. The new foundation is entirely of concrete carried on piles driven to bedrock. The basement story, up to and including the hopper bottoms of the bins, is entirely of reinforced concrete. The train shed is built two stories high, the first story containing the receiving tracks, with two double-track hoppers and four scales, giving space for unloading four cars simultaneously. The second story contains the cleaning machines, dust collecting apparatus and re-elevating legs. There are four scale hoppers in the basement of the train shed, each having a capacity of 1,500 bush. The contents of the hoppers are discharged on belt conveyors, which carry the grain to the receiving elevator legs instead of the main building. There are three steel elevator legs passing from the basement up through the bin story to the top of the cupola in the main building, each having a capacity of 10,000 bush. per hour. These elevator legs discharge through a system of spouting and distributing conveyors to the bins. There are two shipping bins connected to the shipping galleries, each with a capacity of about 10,000 bush. The galleries extend from the face of the bin story to the dock and each one is equipped with a 36-in. belt conveyor for loading grain to vessels. In addition to vessel loaders, there is a special side gallery running at right angles to the shippers, which reaches the mill building, by which the grain supply for the mill is furnished. The car-loading spout is located at the rear, or river side, of the building, and shipments of bulk grain to cars are made through two hopper scales, each equipped with garners, having a capacity of 500 bush. each, and located in the top of the bins at the head of the car spout. All grain for shipment, either directly to the cars, vessel or mill building, is drawn from the storage bins by belt conveyors in the basement and elevated to the top of the building, and reaches its destination through the spouting and conveyor system. The building has a total storage of 500,000 bush., and divided into 60 bins, varying in capacity from 2,000 to 15,000 bush. each. (Abridged from the American Elevator and Grain Trade.)

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MARINE DEPARTMENT

Dominion Marine Association.

The annual meeting was held in Ottawa, Feb. 12, when the following companies were represented: Calvin Co., Hamilton Steamboat Co., F. E. Hall & Co., Lake Ontario and Bay of Quinte Steamboat Co., Midland Navigation Co., Montreal Transportation Co., Montreal and Lake Erie S.S. Co., Montreal and Great Lakes S.S. Co., Niagara, St. Catharines and Toronto Navigation Co., Niagara Navigation Co., Northern Navigation Co., Ogdensburg Coal and Towing Co., Ottawa Forwarding Co., Ottawa Transportation Co., Ottawa River Navigation Co., Parry Sound Transportation Co., Richelieu and Ontario Navigation Co., Rideau Lakes Navigation Co., J. Richardson & Sons, St. Lawrence and Chicago Steam Navigation Co., Upper Ottawa Improvement Co. The President, A. A. Wright, Toronto, was in the chair. Following is a summary of the chief points of interest in the executive committee's report on the work of the past year:

The opposition to the main provisions of Mr. Lancaster's bill respecting Masters and Mates was withdrawn, but the bill did not become law. It has been again introduced at the current session, but as it does not contain anything but the unobjectionable provision the committee is permitting it to take its course. In respect of the provisions of the law requiring signed articles, the committee prepared an amendment, but on consideration the Department came to the conclusion that the proper course was to enforce the statute to the letter in every case. The committee appreciate the advantage of signed articles in all cases if they can be procured, and if the Department's expectations are to be realized the present inconvenience will only be temporary. The question of the abolition of hospital taxes should be again taken up with the Minister, and if possible the support of the Shipping Federation should be obtained. The executive has prepared a petition to the Government to bring in a bill to amend the statute by adding Ontario to the list of provinces and states between which vessels are permitted to coast without being subjected to the provisions respecting pilotage dues. The Shipping Federation was also taking some action in regard to privileges enjoyed by vessels trading from the lakes to ports between Montreal and Father Point, and it would require effort to procure the amendment for which the Association has asked. The matter will demand the attention of the new executive committee. The bill respecting the inspection of steamboats has again been introduced and the new executive or a specially appointed committee should oppose it if necessary. The amendment suggested by the Association so as to make the Canadian statute respecting coasting laws as explicit as that of the United States, did not meet with the approval of the Minister of Customs on the ground that the question was one of policy involving delicate issues. It was satisfactory to note that no prosecution had been instituted against any member in respect of the Lord's Day Act. On different occasions the committee has been urged to ask for further relief from the present requirements of the statute, but it has been thought inadvisable to take any hasty action upon such requests. The Minister of Justice has been asked to construe one or two provisions of the statute, but has replied that the question is one for the courts. The bill in the United States Senate repealing the reciprocal exemption clauses of the main statute had not again been introduced; this question was closely allied with the hospital tax question, and in the meantime it was important that the clauses in question should not be repealed.

The work of the International Waterways Commission with respect to the Chicago Drainage Canal, the Lake Erie dam and the Longue Saulte rapids proposals, was reviewed.

The committee adopted a form of bill of lading, embodying the main features of the United States and Australian acts, for the protection of the carrier, and believe that vessel owners should compel its adoption by refusing to use any other. Definite action is, however, deferred for the moment, as the proposed bill omits the usual stipulation that the carrier is to be responsible for shortages in grain cargoes. In respect of this latter question conditions did not improve during 1907, and complaints regarding the out-turns of cargoes loaded at Fort William and Port Arthur were not confined to cargoes unloaded at Canadian ports. Several members of the Association have suffered heavily and repeatedly from shortages which must have resulted from very serious errors. After considerable correspondence the President and Secretary went to Port Arthur, inspected the grain elevators and had a long conference with parties interested. A report was prepared and a recommendation based upon the suggestions of the conference is under consideration by the Department of Trade and Commerce. The recommendation in effect proposes the imposition on the vessel of a fixed charge up to say 30c. per 1,000 bush. at certain named unloading ports, in consideration of the appointment of weighing inspectors at these points, and the guarantee of the bill of lading quantity by the Government, the Government to keep debit and credit accounts of shortages and surpluses with these elevators, which can be adjusted yearly, and which would show nothing but a comparatively small total balance either way at the end of the season. The President and the Secretary recently had an interview with the Minister of Commerce, but were not very hopeful of favorable action upon this request, the Minister having refused to consider any assumption of responsibility by the Government. A proposal for the pooling of overages among sufferers, with Government assistance, meets with more approval. In the meantime the matter stands until the Grain Commission's report is printed, and it is expected that the officers will then be further consulted by the Government. If assistance cannot be secured it will be necessary to adopt the more drastic remedy which is open to vessel owners, namely, to refuse to carry except upon an amended bill of lading.

The Association had been consulted by the Government respecting the height of the G.T.R. bridge over the Trent Valley Canal route at Trenton, the construction of railway bridges over the Kaministikwia River at Fort William, the extension of the period of navigation on Lake Superior and other matters. It was proposed to make another effort to secure relief from the most objectionable and dangerous nuisance of the Cornwall Canal electric traction cable by means of a petition to and an interview with the Minister of Canals. The question of the improvement of the Welland Canal had also been considered and the executive committee had endorsed a recommendation of the Deputy Minister of Railways and Canals, that a commission should take up the whole question and report; it is hoped that if the improvement of the Welland cannot be undertaken at once such a commission will be appointed without unnecessary delay. Other matters considered and upon which action was taken included consideration of the rules governing the navigation of part of the Detroit River; suction and swell damage cases, coal trade of Port Arthur and Fort William (rate from Duluth to Winnipeg); examination of masters and mates; hydrostatic boiler tests; working hours of marine engineers; the Lake Seamen's Union; Marine Firemen, Oilers and Water Tenders' Union.

The grain section of the Association, which now owned vessels having a capacity of about 6,000,000 bush. or about ten times the capacity of 1897, discussed matters affecting its interests.

The report also referred to the death in May, 1907, of G. T. Marks, one of the Vice-Presidents of the Association, and a valued member of the executive committee and of the grain section of the Association.

The tonnage entered in the Association, and upon which dues have been paid, is now 115,292 net registered tons, of which 81,957 is steam, and 33,335 is barge or sailing property. Several new vessels expected to be included in this total were only put in commission after the assessment for the year was made. Nevertheless the total shows an increase of about 5,000 tons over that of the previous year. The Treasurer's report shows a revenue which has met all expenses with a small balance, and it is recommended

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA FROM JAN. 1 TO 31, 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Reg. tons.	Port of Registry.	Owners.
Alena L. Young	122,090	Boothbay, Me., 1878	Schr.	52.0	17.0	7.0	35	Charlottet'n, P.E.I.	G. Dunn, Murray Harbor, P.E.I.
Lena M	116,732	Port Hillford, N.S., 1904	Schr.	48.6	16.8	7.4	28	Canso, N.S.	C. S. Strople, Boylston, N.S.
Rossignol	126,032	Liverpool, N.S., 1908	Schr.	119.5	30.2	11.0	199	Liverpool, N.S.	A. W. Hendry, Liverpool, N.S.

Note.—No steam vessels were registered during January.

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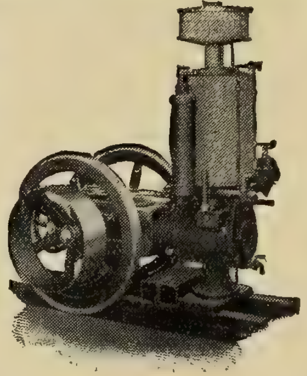

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that the present rate of assessment be continued.

The special committee upon aids to navigation reported having made a recommendation to the Department as to aids and improvements required between the head of the lakes and Montreal. In connection with these recommendations the additional lights or buoys or improvements have been fixed or made in 17 instances; are under consideration in seven cases; and are to be made at four points; no action has been taken in four other cases, and in one instance only has the recommendation of the committee not been approved. The report was unanimously adopted.

In reference to the Minister of Justice's announcement in Parliament that it was intended to make changes in the admiralty courts and apparently to abolish the present separate judiciary and system, and transfer the jurisdiction to the regular civil courts of the various provinces, it was resolved that the Association disapprove of these proposals and the Secretary was instructed to prepare and present a memorial setting forth reasons therefor.

The executive committee was elected as follows: T. Donnelly, B. W. Folger, H. H. Gildersleeve, J. H. Hall, L. L. Henderson, C. A. Jacques, J. P. Kavanagh, D. Murphy, J. Playfair, F. Plummer, C. J. Smith, A. A. Wright.

C. H. Nicholson, of the Northern Navigation Co., advocated the adoption of some plan whereby members of the executive committee would be elected for stated periods, so that a certain number would retire annually by the expiration of their terms of office. He urged that in this way the committee would more readily receive new members, while at the same time retaining each year a certain number of members in touch with its affairs, and he gave notice of amendment of the constitution accordingly, and that the proposal be set out definitely in the call for the next annual meeting so that it may be then voted upon.

The following were appointed as a committee on aids to navigation: S. C. Calvin, T. Donnelly, W. H. Featherstonhaugh, H. H. Gildersleeve, L. L. Henderson, D. Noonan, R. W. Shepherd, C. J. Smith and A. A. Wright.

At a subsequent meeting of the executive committee A. A. Wright, St. Lawrence and Chicago Steam Navigation Co., was re-elected President; C. J. Smith, Richelieu and Ontario Navigation Co., was re-elected First Vice-President, and H. H. Gildersleeve, Northern Navigation Co., was elected Second Vice-President.

During the day the members of the Association attending the meeting visited the Marine and Public Works Departments, and the House of Commons. At the Marine Department they were received by the Minister, Hon. L. P. Brodeur. F. King, Secretary of the Association, urged that in reference to the proposals to require the engagement of pilots on all vessels east of Montreal, no amendment should be laid before Parliament without being first submitted to the Association, and he asked for the abolition of the hospital tax in Quebec Province. The President, A. A. Wright, urged that the marine engineers' bill to amend the Canada Shipping Act now before Parliament, should not be passed, showing that to require licensed engineers on tugs in minor inland waters would prove a great hardship to tug owners and put a number of competent men out of employment.

The Minister promised consideration to the remarks made regarding the Pilotage Act; stated that while legislation regarding the hospital tax would not be brought down this session, some steps would probably be taken to alleviate the burden, and seemed much impressed with what was said regarding the marine engineers' bill, discussing the possibility of compromise to protect existing engagements and promising careful consideration.

At the Public Works Department the members were received by the Deputy Minister and Chief Engineer, in the absence of the Minister in New Brunswick. The request was made that no assent be given to more than one bridge over the Kaministikwia River at Fort William, between the G.T. Pacific Ry. bridge and the mouth of the river, and that no bridge be permitted unless of the most modern character and with no central pier. It was recommended that the new breakwater at Port Arthur be placed farther out than as at present proposed, so as to provide ample room for vessels, due regard being had to future requirements and extensions as well as present needs. The necessity of a more vigorous prosecution of the work of improving the navigation of the Ottawa River below Ottawa was also urged.

The Minister of Railways received the deputation in his room at the House of Commons, several of the deputation spoke. A strong protest was made against the compulsory use of electric traction on the Cornwall Canal. It was urged that the Government should properly survey and investigate the question of enlarging the Welland Canal before committing itself to any particular waterway. It was asked that no unnecessary delay for repairs or otherwise be permitted in opening the canals in the spring, particularly the St. Lawrence, Ottawa and Rideau canals, also that the canal regulations be strictly and impartially enforced, and that they be amended if necessary, to provide better protection against improper and unsafe mooring of vessels.

As in former years, Dennis Murphy, President of the Ottawa Forwarding Company, entertained the members of the Association to luncheon at the Laurentian Club.

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Richelieu and Ontario Navigation Co.

Following are extracts from the report for the year 1907, presented at the annual meeting in Montreal, Feb. 19: The gross earnings were $1,305,004.14, and the net profit, after providing for fixed charges, interest, etc., $261,423.47. The operating expenses were 78.70% of the gross earnings, as against 79.70% in 1906. Four quarterly dividends of 1¼% were paid. The new observation steamer Rapids King, specially designed for the rapids, went into commission June 15 last, and her performance and advantages are such that the directors recommend the early building of a sister ship to be called the Rapids Queen. The following directors were elected during the year: Hon. J. P. B. Casgrain, vice Lt.-Col. Henshaw, deceased. A. Haig Sims, vice J. Kerr Osborne, resigned. The insurance fund has been credited with $36,000 out of the year's earnings, and $72,000 now stands to its credit. The steamers, hotels, shops, wharves, etc., were thoroughly maintained and improved during the year. The 1895 bond issue, originally amounting to $571,833.33, now stands at $293,946.71. During the year the company redeemed $29,200 of this issue. The shareholders on Feb. 12, 1907, authorized an issue of £400,000 of 5% 30 year debentures, and since that time the directors have made arrangements for the disposal of £200,000 thereof. Out of the proceeds of this sale the total remaining outstanding debentures of the 1895 issue have been or will be redeemed, and there will remain in the treasury cash sufficient for the company's present requirements.

ASSETS.

Steamers, real estate and buildings, dock, wharves, etc.	$4,114,661.13
Coal, stores, provisions, etc.	94,806.29
Accounts receivable	72,551.03
	$4,282,018.45

LIABILITIES.

Capital stock		$3,132,000.00
Bonds 5% sterling	$571,833.33	
Less cancelled	277,886.62	
		293,946.71
Accounts payable		145,256.09
Unclaimed dividends		216.00
Bank loans		292,303.78
Accrued fixed charges		4,899.10
Insurance fund		72,000.00
Surplus		341,396.77
		$4,282,018.45

INCOME ACCOUNT.

Surplus, Dec. 31, 1906	$326,503.53
Net profit for 1907	261,423.47
	$587,927.00
Four quarterly dividends of 1¼%	156,600.00
Carried to insurance fund	36,000.00
Written off steamers, etc.	53,930.23
Net surplus	341,396.77
	$587,927.00

The retiring officers and directors were re-elected for the current year as follows: President, R. Forget, M.P.; Vice-President, W. Wainwright; Directors, Sir H. M. Pellatt, Hon. J. P. B. Casgrain, Hon. L. J. Forget, H. M. Molson, C. O. Paradis, G. Caverhill, W. Hanson, A. H. Sims; General Manager, C. J. Smith; Secretary, F. P. Smith.

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Atlantic and Pacific Ocean Marine.

The British Government has renewed the contract with the Cunard Line for the conveyance of mails between Liverpool and New York till 1928.

A press report states that the C.P.R. has chartered two steamships named Lennox and Braemar, to take the places of the Tartar and Athenian recently sold to a Japanese company.

The Quebec Steamship Co.'s steamship Bermudian landed at New York, Feb. 6, the captain and crew of the schooner Mary L. Newhall, owned in Bath, Me., which was abandoned in a sinking condition about 200 miles off Bermuda, Feb. 3.

Captain Alex. Marshall, nautical adviser to the Fairfield Shipbuilding Co., Glasgow, Scotland, who died recently, was for some time connected with a company in establishing the Pacific steamship service which preceded the C.P.R. Empress line.

The whole of the cargo has been removed from the wrecked C.P.R. steamship Mount Temple, and a large quantity which was absolutely uninjured has been forwarded to its destination. The remainder was sold by auction, and realized about $100,000.

The C.P.R. takes second place in the list of passenger carrying companies in the traffic from the American continent to European continental ports, the American Steamship Line being first; and fourth place in the traffic to the British Isles, the order being: Cunard, White Star, Anchor, C.P.R.

It is anticipated that a steamship service between St. John, N.B., Boston and Havana, will be inaugurated during March. P. F. Doody, of Boston, Mass., interviewed various railway companies and merchants in the province recently, and has arrived at the conclusion that sufficient business offers to warrant the service.

The Commonwealth Steamship Line of Sydney, Australia, has commenced its regular sailings between Australia and British

Columbia, with the despatch of the steamship Oriana, with a cargo of frozen mutton consigned to P. Burns & Co., Vancouver. On the return journey the Oriana will call at Puget Sound ports, and San Francisco, for lumber and general cargo.

A report from England, Feb. 9, stated that the firm of Sir James Laing and Sons, with shipbuilding yards at Sunderland and Deptford, employing over 5,000 men, was in financial difficulties, and that a meeting of creditors had been called to consider a scheme of reconstruction. Several of the Cunard and Peninsular and Oriental steamships have been built at these yards.

Hon. L. P. Brodeur, Minister of Marine, gave notice Feb. 16 that he would move a resolution in the House of Commons, to authorize the Government to enter into a contract for 10 years with any individual or company for the provision of a steamship service between Canada and France, and to grant a subsidy not exceeding $100,000 for a service of 18 return voyages a year, and so on in proportion for a more frequent service.

A conference of the officials of the various steamship companies engaged in the North Atlantic passenger service, has resulted in the arrangement of a working agreement, whereby the recent rate war is ended, and the rates restored to a normal basis. The agreement covers the rates for all classes of passengers, both eastbound and westbound, and involves the division of the Continental third-class traffic with the Continental companies.

The Postmaster-General, replying to a question in the Imperial House of Commons, Feb. 11, said the question of the renewal for a limited period under certain conditions of the contract with the C.P.R., for the conveyance of mails to Canada and China, had been raised by the Canadian Government, and was then under consideration by the Imperial Government. The contract includes the carriage of the mails across the Atlantic and the Pacific oceans, as well as the rail transit across Canada, and is a competitive service with the former all-water route via the Suez Canal.

Replying to a question in the House of Commons recently, the Premier said a subsidy has been paid to a line of steamships between Australia and Vancouver since 1893. The subsidy paid was $122,666.67 annually up to and including 1901-02, since then the following amounts have been paid: 1902-03, $131,025.63; 1903-04, $116,800; 1904-05, $194,666.66; 1905-06, $186,975.43; 1906-07, $135,382; 1907, to Sept. 26, $72,897.65. A contract has been forwarded to the contractors for signature, which has not yet been accepted, nor has the Australian Government come to terms with the contractors.

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Maritime Provinces and Newfoundland.

The New Brunswick Public Works Department recently received tenders for building a low water wharf at Waterboro, N.B.

D. J. Purdy, St. John, N.B., who has considerable shipping interests in the province, has joined the New Brunswick Government, without portfolio.

Capt. T. Kidwell, who was recently transferred from the Pacific to the Atlantic service, died on board the White Star S.S. Georgia recently, and was buried at sea.

A steam trawler, named Labrador, was launched in France recently, for service off the Cape Breton coast. It is anticipated that she will arrive at Sydney, N.S., early in the spring.

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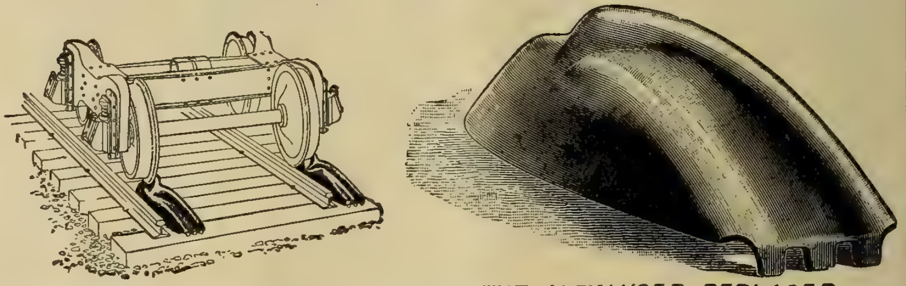
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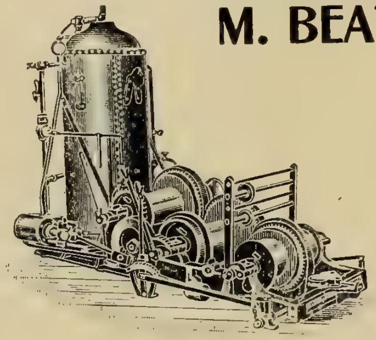
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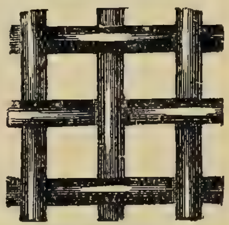
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The Leyland Line S.S. Canadian recently landed at Boston, Mass., the crew of eight men rescued at sea from the British brig Sunbeam, bound in ballast from Pernambuco to St. John's, Nfld., and which has been lost.

The Black Diamond Steamship Co.'s S.S. Coban, after loading coal and departing, returned to Yarmouth, N.S., Feb. 3, having had a mishap with her boilers. She had only recently been released from Halifax, where she had undergone extensive repairs.

The schooner Perry C., of Parrsboro, N.S., was wrecked on the Little Duck Island ledges recently. She was built at Port Greville, N.S., in 1906, her dimensions being: length, 134.5 ft.; breadth, 32.1 ft.; depth, 10.8 ft., and was run by J. W. Cochrane, Fox River, as managing owner.

The crew of the N.S. schooner Baden Powell, wrecked on the Falkland Islands Nov. 23, were landed at Halifax, Feb. 8, from the Allan Line steamship Tunisian. The crew were picked up at the Falklands by a Liverpool, Eng., bound vessel, and taken there, and subsequently transferred to the Tunisian.

The Dominion Minister of Public Works, after conferring with a St. John, N.B., deputation, Feb. 13, in regard to the wharf extension to be built by the Government, agreed that it be constructed on the plans which had been prepared by the city. It is understood that the site is being transferred to the Government.

The specifications and plans for the construction of another icebreaking steamer for use in Northumberland Strait, as approved by Sir P. Watt, Chief Constructor of the British Admiralty, are under consideration by the Dominion Government. The Minister of Marine stated in the House of Commons recently that if a contract was given immediately, delivery would be obtained by Dec. 1.

The Newfoundland steamship Home, which recently visited the wrecked steamship Tolesby, on her return to St. John's, reported that the vessel had broken in two, the after part having sunk in deep water. The fore part remains fast on Seal Cove Point, and the cargo there, consisting of 5,000 bales of cotton, was apparently safe. On account of the high sea running, salvage operations were for the present impossible.

The statement of the committee responsible for the administration of the relief fund raised for the benefit of the sufferers by the loss of the schooners Effie M. and Alma, has been published in the Newfoundland Gazette. It shows that 9 widows, 20 orphaned and other children under 14 years of age, and 3 aged and helpless relatives of the men lost, have been assisted. The total amount received in subscriptions was $4,442.40, and amount disbursed $4,440.77.

The Dominion Government Customs S.S. Argus broke from her moorings and ran ashore near Dartmouth, N.S., during a storm, Feb. 2. She was discovered about two miles from where she had been moored, high and dry, with her funnel missing and otherwise badly damaged. She was built at Lockeport, N.S., in 1884, and is a screw steamer with engines of 50 n.h.p. Her dimensions are: length, 55 ft.; breadth, 13 ft.; depth, 6.1 ft.; with a tonnage of 27 gross and 19 register.

A severe storm raged along the Nova Scotia coast during the first week of Feb., doing considerable damage to local shipping, suspending the ferry service between Halifax and Dartmouth, and causing considerable delay in the departure of several ocean-going vessels. The Allan Line S.S. Grampian, which was due to sail Feb. 1, did not leave until Feb. 4, and the C.P.R. steamship Montrose was also delayed till the same date. The damage to shipping and wharves is stated to be well up in the thousands of dollars.

The Eastern Steamship Co., which runs vessels between St. John, N.B., and Boston, and is a part of the Consolidated Steamship Lines, is, with the parent company, in the hands of a receiver. For the period of nine months ended Sept. 30, 1907, it showed earnings of $332,488 gross, and $195,046 net, and a statement of the company's affairs to Nov. 30 shows assets of $7,270,884, and liabilities $6,779,313. W. T. Cobb and C. Austin, Boston, Mass., have been appointed receivers. C. W. Morse, the promoter of the amalgamation of companies, was recently reported to be missing, but was subsequently traced to England, and on returning to the U.S. was arrested on a charge of grand larceny.

The Allan Line S.S. Sardinian recently landed at Halifax, N.S., the crew of the bark Aquila, which was reduced to a derelict, and subsequently set on fire for safety, during the recent storm, which wrecked the C.P.R. steamship Mount Temple. The Aquila was bound from Richibucto, N.B., to New York, with laths, and was caught in the storm off Cape Cod. The crew were taken from the vessel by the Anchor Line S.S. Italia, and were taken to Genoa, Italy, from whence they were sent to London, Eng., by the British Consul, where they shipped on the Sardinian. The Aquila was built at Georgetown, P.E.I., in 1888, her dimensions being: length, 92.8 ft.; breadth, 24.6 ft.; depth, 10.7 ft.

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Province of Quebec Marine.

The Richelieu and Ontario Navigation Co. has placed an issue of $1,000,000 5% mortgage bonds on the London, Eng., market, realizing slightly under 96%. The money realized will be used to pay for steamboats purchased.

The Government steamship Lady Grey is to be utilized for the service to Seven Islands, usually performed by the ice-breaking steamer Montcalm, the repairs on which have not been completed. The first trip is scheduled for the first week of March.

G. W. Stephens, Chairman of the Montreal Harbor Commission, and F. W. Cowie, chief engineer, inspected the port of London, Eng., early in Feb., after which they visited other ports in Great Britain, before proceeding to Holland, Belgium and France to inspect harbor works and conditions there.

The St. Lawrence Lumber Industrial Co., Ltd., has been incorporated under the Quebec Companies Act, with a capital of $300,000, and power, among other things, to build or acquire and operate steam and other vessels, and to carry on the general business of carriers of passengers and goods by land and water.

Plans for a proposed car ferry steamer 260 ft. long, with a capacity for 15 cars, and with facilities for landing them at every stage of the tide, for use on the St. Lawrence, have been submitted to the Quebec City Council. It is proposed to establish a ferry, in view of the delay in the construction of the Quebec bridge, and the aid of the Dominion Government will be sought.

In regard to the Dominion Government's proposed action abolishing the various Admiralty Courts throughout the country, the Montreal Board of Trade has petitioned the Governor-General-in-Council, praying for the retention of the courts, which have given satisfaction to shipowners and underwriters, and suggest that in future the judge of the Montreal Admiralty be remunerated by a fixed sum paid out of the consolidated fund, instead of by fees as at present.

The longshoremen at Montreal and Quebec, according to reports, are preparing for their annual demand for an increase of pay. It is stated that the Quebec men are to ask for an additional five cents an hour, making 42½ cents and 47½ cents an hour, for day work and overtime respectively. No demand has as yet appeared from the Montreal men, but it is known that an agitation for five cents an hour increase was in progress. Following on the remarks of the President, at the recent meeting of the Shipping Federation regarding the high charges in force at Canadian ports, as compared with those of other countries, the Federation has decided that the rates its members will pay in Montreal and Quebec for the approaching season will be 25 cents and 30 cents an hour for day and night work respectively, with a bonus of 2½ cents an hour for men who have worked throughout the season. The rates paid last season were, Montreal, 27½ cents and 32½ cents an hour, with 2½ cents an hour bonus; Quebec, 37½ cents and 42½ cents an hour. The C.P.R., which makes Quebec the summer terminus of its Empress boats, during last season made investigations as to the possibility of utilizing Three Rivers as a terminus, on account of the constant trouble experienced at Quebec, and declined to accept freight for Quebec unless consigned to Montreal and then transhipped by rail to Quebec. Should the trouble become acute there is the possibility that the C.P.R. may abandon Quebec as its summer terminus.

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Ontario and the Great Lakes.

J. B. Peterson, a well-known lake steamship captain, died at Port Colborne, Ont., Feb. 9.

The Wabash Rd. is building a large slip dock at Detroit, Mich., for its car ferries between that city and Windsor, Ont.

E. Armstrong, who had been connected with the towage of vessels through the Welland Canal since the horse-towing days, died at Port Colborne, Ont., Feb. 16, aged 68.

Tenders will be received by the Railways and Canals Department to Mar. 12, for works connected with the construction of no. 3 section of the Ontario-Rice Lake division of the Trent Canal.

The Reid Wrecking Co., Sarnia, have raised the steamboat Fred. Pabst, which was sunk in the Detroit River in Nov. As soon as a way can be cleared of ice, the vessel will be removed for repairs.

On the arrival of the car ferry Ontario No. 1, at Cobourg, Feb. 15, the officers reported that the lake was frozen over from shore to shore. The ferry experienced no difficulty in negotiating the ice, and proved herself a reliable winter service boat.

The Montreal, Ottawa and Georgian Bay Canal Co. is making an application at the current session of the Dominion Parliament for an act granting an extension of time to 1910 for the starting of construction and to 1916 for the completion of the projected canal.

The Detroit, Belle Isle and Windsor Ferry Co.'s franchise for a ferry service at Windsor, Ont., expires Oct. 3., and the Minister of Inland Revenue stated in the House of Commons, Jan. 27, that if a satisfactory arrangement could not soon be made with the present licensees for a renewal, tenders for the franchise would be asked.

The petition for the winding up of the Upper Ontario Steamboat Co. was dismissed Feb. 4, pending negotiations for settlement of the petitioner's claim. The company

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owns three steamboats trading on the White River route, Larder Lake, Long Lake, and the Montreal River from Latchford for 75 miles. The head office is at New Liskeard, and the majority of shares is held locally.

With reference to the paragraph in our Feb. issue, stating that the Mutual Transit Co. of Buffalo, N.Y., was arranging to run a line of steamers between Goderich and Lake Michigan ports, we are advised that the matter is at present in a negotiatory state, and that until proper facilities, such as wharves and railway connections, are constructed at Goderich, nothing can be done.

The Canadian Association of Masters and Mates' sixth annual meeting was held in Toronto, Feb. 12, when it was suggested that the Government be requested to make a grade and grant certificates to second mates. The following officers were elected: Master, Capt. J. H. McMaugh, Toronto; First Officer, Capt. F. Scott, Collingwood; Secretary-Treasurer, Capt. H. O. Jackson, Toronto.

Referring to the development of trade at Port Stanley, Ont., R. W. Young, Agent of the Pere Marquette Rd., London, stated Feb. 10, that during the season of navigation of 1907, there were brought to the port 136 cars of freight direct from ocean steamers, and from Mar., 1907, to Jan. of the present year the P.M. Rd. had handled on an average 40 cars of coal a day, brought into Port Stanley by water.

The Railway Committee of the House of Commons, Feb. 18, passed the bill extending the time for the construction of the Montreal, Ottawa and Georgian Bay Canal. The company is given until 1910 to begin construction and to 1916 to complete the work, and a clause has been inserted providing that the Government may at any time expropriate the works of the company upon giving three weeks' notice.

A proposal has been submitted to the various lake steamship and dock companies under the management of R.O. and A. B. Mackay, Hamilton, Ont., for the combining of their several interests. The capital mentioned in connection with the proposed change is $2,000,000, and the object aimed at is to secure a unanimity, as well as economy in the management, in view of the keenness of competition now experienced in regard to freight traffic on the lakes.

The U.S. Lake Survey reports the water levels of the Great Lakes for Jan. as follows: Superior, 602.10 ft.; Michigan and Huron, 580.42 ft.; Erie, 572.52 ft.; Ontario, 246.73 ft., above tide water. Since Dec., the levels have fallen, in Superior, 5½ ins.; Michigan and Huron, 2 ins.; Ontario, 5½ ins., while Erie has risen 3½ ins. As compared with the average Jan. levels for 10 years, Superior is 3¼ ins. below, Michigan and Huron, 5 ins. above; Erie, 10¾ ins. above; Ontario, 18½ ins. above.

The Huntsville, Lake of Bays, and Lake Simcoe Navigation Co.'s annual meeting was held in Toronto Feb. 11. We are advised that the report, which is not made public, showed a considerable increase in gross and net earnings over previous years. The officers and directors for the current year, who were re-elected, are: President, C. O. Shaw; Vice-President, H. Foster Chaffee; General Manager, S. H. Jacobs; Assistant Gen. Manager and Secretary, W. J. Moore; Treasurer, J. McKee.

In response to a question in the Ontario Legislature, Feb. 14, respecting the Government fisheries cruiser Lurline, recently wrecked within a few days of purchase, it was stated that the vessel was purchased Oct. 4, from J. H. Walker, of Walkerville, Ont., for $10,000; was built in 1888, and inspected by W. E. Redway. Nothing was spent on repairs. She was wrecked Oct. 26, and efforts were made to save her, without success. She was not insured. The engine and boiler had been sold to the highest bidder for $850.

The Temiskaming Navigation Co., which has recently obtained a provincial license, was formed to take over the business carried on by the late A. Lumsden, and runs various services from the C.P.R. station to New Liskeard, 70 miles, and also between The Head and New Liskeard, and North Temiskaming and Murray City. It sent a representation to the Minister of Public Works recently to ask that the claim of New Liskeard for a Government dock be favorably considered, and also the question of a dam at the outlet of the lake

Hon. W. Pugsley, Minister of Public Works, at a banquet at Collingwood recently, said: "There is an agitation to deepen the harbors of Fort William and Port Arthur. If there is one thing more than another that should be evident, it is that the depth of the harbors on the eastern shores of the Great Lakes should be the measure of the depth of the harbors on the western side. The policy I shall urge is that the harbors in the west shall be dredged to a suitable depth, and on the east side the same depth given to the harbors. In this way only can the trade of the west be kept in Canadian channels."

The Turbine Steamship Co.'s annual meeting was held in Toronto, Feb. 3, when it was suggested that the Turbinia should be placed on the Toronto-Hamilton route next season. The company has entered into a contract with the projected Buffalo, Toronto and Niagara Ry., to run a service of boats between Toronto and Niagara-on-the-Lake, in connection with the railway companies' proposed fast electric line to Buffalo, when that line is completed. The following directors were elected for the current year: J. C. Eaton, Toronto, President; J. Moodie, J. Knox, A. Leitch, Hamilton; C. R. Simpson, H. McGee, J. J. Vaughan, Toronto.

The Minister of Railways and Canals in reply to a question as to the work done by the Dominion Government on the waters tributary to the Trent Canal in Victoria and Haliburton counties, under the agreement with the Ontario Government, since the taking over of these waters from the Province, said in the House of Commons recently, no new works had been undertaken; $15,948.09 had been expended on repairs to former works; rebuilding bridges and dams and miscellaneous works had cost $14,948; and 12 floating lights had been placed on Scugog River, at a cost of $1,000. Various works were to be carried out during the current year at an estimated cost of $8,000.

The regulations respecting the operations of the ferry between Gower Point, Ont., and Lapasse, Que., across the Ottawa River, tenders for which were received Feb. 10, provide that the limits of the ferry shall commence one mile above and one mile below each point named, and that the licensee shall provide and maintain a suitable ferry boat, not less than 36 ft. long by 22 ft. wide, capable of carrying one loaded team and 20 passengers, and he shall construct and maintain on either side of the river suitable landing stages with all necessary appliances, and shall cross at any such times as public convenience may require between sunrise and sunset every day except Sundays, when hailed by passengers from either side of the river. The boat is to be placed on the route by May 1, and license granted for 5 years from that date.

The Dominion Transportation and Storage Co. is the title under which the Dominion Parliament is being asked at the current session to incorporate a company with the following as provisional directors: D. McGillivray, J. Norcross, Port Colborne, Ont.; W. E. Phin, Welland, Ont.; J. Battle, Thorold, Ont.; R. M. Wolvin, Duluth, Minn. The capital is to be $1,500,000, of which $500,000 may be preferred stock redeemable at any time at the option of the directors at 115, and accumulated dividends, and the head office is to be at Welland, or such other place in Ontario as may be fixed by by-law. The company may for the purposes of its business construct, acquire and navigate steam and other vessels for the conveyance of passengers, goods and merchandise; carry on the businesses of elevating grain, of common carriers of passengers, and goods and of forwarders, wharfingers, warehousemen and shipbuilders; construct or otherwise acquire docks, elevators, warehouses, etc.; construct or aid in the construction of terminals, harbors, etc.; construct or acquire facilities for lightering steam and other vessels, and charge tolls for the same; acquire the good-will, etc., of any person or company having objects similar to the company, and to pay for the same in shares of the company, and engage in the business of a wrecking company. The company also seeks authority to issue bonds or debentures in aid of the construction of vessels, but not to a larger amount than the cost of such vessels.

Manitoba, Saskatchewan, Alberta, Etc.

A. R. Dufresne, engineer in charge of the construction of the St. Andrew's locks, stated at Winnipeg recently that the work should be completed by the opening of navigation in 1910. The work of excavation for the approaches, lock and dam, commenced in June, and since then 19,000 cubic feet of concrete has been laid and the lock completed. The lock is 290 ft. long, 215 ft. from gate to gate, 45 ft. wide, and 37 ft. deep. The drop for vessels will be about 21 ft. The dam will be 230 ft. long, and is expected to be completed by the end of March. To enable the work to be accomplished during the winter, a large space is enclosed, and the materials for the concrete kept at an even temperature by steam pipes. The dam is said to be the first of its kind on this continent, being a movable one, which will allow accumulations of water to escape from time to time, while maintaining a proper depth of water above the locks. The movable part is made up of a series of steel frames and curtains, operated by electrical power from an overhead service bridge. When this work is completed, the largest vessels operating on Lake Winnipeg will be able to go up to Winnipeg.

B.C. and Pacific Coast Marine.

The British barque Englehorn, bound from Hamburg to Tacoma, was towed into Esquimalt in a damaged condition recently, having experienced rough weather.

The C.P.R. steamship Princess Ena, launched in Nov., arrived at Victoria recently in charge of Capt. Cooper, formerly of the C.P.R. steamship Athenian.

A marine way is being constructed by A. Wallace at North Vancouver, B.C., of sufficient size to take on any of the vessels trading to the port. The cost of the plant is estimated at $250 000.

The Rock Creek Lumber Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000 and power, among other things, to acquire and operate steam and other vessels for its business.

The Chase Lumber Co., Ltd., has been incorporated under the B.C. Companies Act,

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with a capital of $10,000, and power among other things to acquire and operate steam and other vessels in connection with its business.

Capt. F. E. Ferris, who recently left the C.P.R. Pacific coast steamboat Princess May to become Assistant Superintendent of the Pacific Coast Co., has resigned that position, and taken that of master of the oil tank steamer Argyle.

The Department of Marine has plans and specifications prepared for the construction of a 20 knot, armed, seagoing cruiser, for the patrol of the deep sea fisheries on the Pacific coast. Tenders will be called for at an early date.

The C.P.R. appropriations for the current year include provision for the construction of a tug and an eight-car barge on Arrow Lake, B.C.; an eight-car barge on Slocan Lake; an eight-car barge for the fruit trade on Okanagan Lake, and a deck barge for Trout Lake.

In response to a question in the Dominion House of Commons Feb. 3, the Premier said that action had been taken by the Government to secure compensation from the United States for seizure of the steamboat Coquitlam, which the U.S. courts had decided was illegal.

The B.C. Government during the year ended June 30, 1907, expended $14,430.52 on repair and maintenance of wharves, and paid $1,250 to the Upper Columbia Transportation Co., as a subsidy for the maintenance of a steamboat service on the Columbia River above Golden.

The contract for repairing the damages sustained by the British sailing ship, Port Patrick, which collided with the lightship in the Columbia river, and subsequently ran aground near Gray's harbor, Jan. 6, has been placed in Victoria, the amount involved being about $22,000.

The Kincolith Packing Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $60,000, and power, among other things, to acquire foreshore rights, wharves, steam and other vessels; to carry passengers and freight, and to carry on the businesses of shipowners, ship brokers, freight contractors and carriers by land and sea.

The Dominion Government has received $82,549 from the Russian Government in settlement of outstanding claims for wrongful seizure of Canadian vessels. The distribution of this sum was under consideration, according to a statement made by the Premier in the House of Commons, Feb. 3. This arises out of claims for the illegal seizure of vessels engaged in sealing operations.

The Boscowitz Steamship Co.'s steamship Vadso, which ran ashore at Cape Lazo, Jan. 16, has been towed to Esquimalt by the B.C. Salvage Co.'s steam tug Salvor. The salvage operations were conducted under considerable difficulties on account of heavy weather. After being floated, temporary repairs were undertaken at Comox, prior to placing her on the B.C. Marine Railway at Esquimalt, where an examination will be made and tenders called for repairs.

The Proctor Lumber Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $250,000, to carry on the business of timber merchants, etc., with power to construct and operate tramways, etc.; to avail itself of the advantages and immunities conferred by the Rivers and Streams Act relating to the improvement of waterways; to acquire steam and other vessels, and to carry on the general business of shipowners, and general carriers by land and water.

The Shuswap and Thompson Rivers Boom Co. is applying at the current session of the Dominion Parliament for an Act authorizing it, among other things, to deepen, widen or improve the channels of any of the two rivers or their tributary waters, by removing all hindrances to navigation. The head offices of the company are at Revelstoke, B.C.; its capital is $100,000 and the provisional directors are: O. Lachmund, Revelstoke, B.C.; F. L. Buckley, Enderby, B.C.; S. H. Bowman, Minneapolis, Minn.; J. McGoldrick, Spokane, Wash.; T. Kilpatrick, Revelstoke, B.C.

The enquiry into the collision between the S.S. Tartar and the ferry steamboat Charmer, both belonging to the C.P.R., off Vancouver, Oct. 17, has been concluded. The court held that both vessels were to blame for travelling too fast in a fog. The pilot of the Tartar, and the captain of the Charmer were severely censured, while the captain of the Tartar was exonerated from all blame. Under all the circumstances, it was stated there was not sufficient to justify any cancellation of certificates, and as both vessels were owned by the same company, no order as to costs was made.

R. J. Burde, Alberni, is reported to be negotiating for the purchase of a scow and steam tug at Victoria, which it is intended to use in the Alberni canal, in conjunction with the steamboat Tasmanian. The Tasmanian was built at Lake Bennett in 1899, and was operated on Lake Le Barge for some time, subsequently being taken to Skagway, where she was sold and sent to Victoria, where she was bought by G. A. Huff for the Alberni canal navigation. She is a screw steamer of 5 n.h.p., 21 tons gross, 12 tons register; her dimensions are: length, 64 ft.; breadth, 9.4 ft.; depth, 4.4 ft.

The Western Rivers Improvement Co. is applying at the current session of the Dominion Parliament for an act of incorporation and authority subject to the provisions of the Navigable Waters Protection Act, to improve the navigation of the Thompson River and tributary waters, and maintain on the same tugs and other vessels. It also asks power to construct and operate telegraph and telephone lines in connection with its works. The capital of the company is $50,000; its offices are at Kamloops, B.C.; and the provisional directors are: J. C. Shields, Regina, Sask.; G. L. Ormsby, A. Bauman, Kamloops, B.C.; H. T. Warne, Annis, B.C.; D. Murphy, Ashcroft, B.C.

The stern-wheel steamboat ordered by the G.T. Pacific Ry., as mentioned in our Feb. issue, was launched from Alex. Watson's yard, Victoria West, recently, and will be ready for service in the spring. Her dimensions are: length, between perpendiculars, 136 ft.; beam, extreme on bottom, 29 ft.; on deck, 30 ft.; depth, moulded, 5¼ ft. The machinery, which is being supplied by the Polson Iron Works, Ltd., Toronto, consists of one pair of stern-wheel type engines, with cylinders 15 ins. diameter, by 72 ins. stroke, supplied with steam by a locomotive type boiler, 27 ft. 4½ ins. long over all, by 68 ins. diameter, at a pressure of 212 lbs.; a turbine generating set supplying power for 100 16 c.p. lamps, and one 12 in. searchlight; steam capstan with two 7 by 9 engines; steam steering gear, two duplex ram pumps, each 6 by 4 by 6, hand deck pumps, syphons, and all engine room fittings.

* * *

Agnes and N. N. Smith, carrying on business as R. Smith & Co., Winnipeg, in connection with the operation and furnishing of the C.P.R. boarding car department in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia, have dissolved partnership, the business being continued by N. N. Smith.

Notices to Mariners.

The Dominion Department of Marine has issued the following notices:

No. 1. Jan. 7—British Columbia—1. Chatham sound, Hodgson reefs, gas and whistling buoy established. 2. Observatory inlet, uncharted rock between Larcom and Frank islands.

No. 2. Jan. 10.—Ontario Lighthouse division—3. Ottawa river, Lake of Two Mountains, Oka, lighthouse moved. 4. County of Vaudreuil, Que.; Ottawa river, Rigaud river entrance, lighted buoys established.

No. 3. Jan. 13.—British Columbia—5. Vancouver island, west coast, Clayoquot sound, Hecate passage, Halftide rock, buoy established. 6. Vancouver island, west coast Clayoquot sound, Templar channel, buoys established. 7. Juan de Fuca strait approach, Swiftsure bank, gas, whistling and bell buoy adrift.

No. 4. Jan. 15.—Nova Scotia—8. Southwest coast, Seal island, change in character of light.

No. 5. Jan. 27.—Quebec—9. Gulf of St. Lawrence, north shore, Watagheistic sound, uncharted rock in entrance. St. Pierre, Miquelon—10. Little Miquelon or Langlade Island, Plate point, change in fog alarm.

No. 6. Jan. 29.—Ontario—11. List of storm signal stations on the Great Lakes and connecting waters.

No. 8. Feb. 5.—Nova Scotia—15. West coast, off Cape Fourchu, submarine fog bells established. United States of America—16. Maine, St. Croix river, Dochet island, intended fog signal.

No. 9. Feb. 8.—Ontario—17. River St. Lawrence, Brockville narrows, east end, gas buoy established. 18. River St. Lawrence, gas buoy established above Cole shoal. 19. Lake Ontario, off Toronto, Gibraltar point lighthouse, date of establishment corrected. 20. Lake Huron, Southampton, front range lighthouse repaired, exhibition of permanent light. 21. Lake Huron, Manitoulin island, Providence bay, hand foghorn at light station. 21. Lake Simcoe, Fox island, light discontinued.

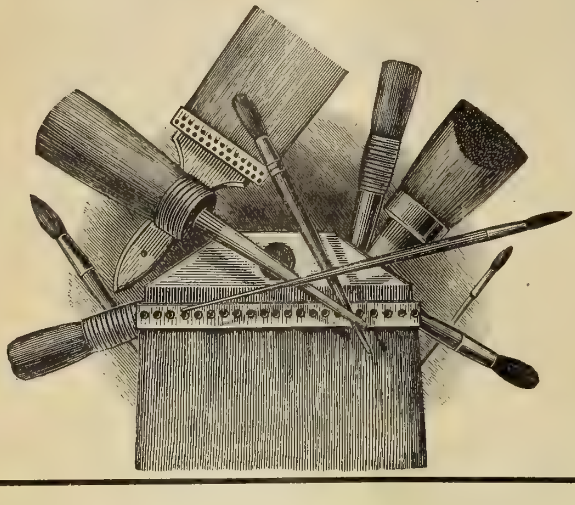
No. 10. Feb. 10—Ontario—23. Lake Erie, Port Colborne, change in position of back range light, change in lights.

No. 11. Feb. 11.—New Brunswick—24. South coast, Bay of Fundy, Quaco, eastern breakwater pier damaged, lighthouse destroyed. Nova Scotia—25. Bay of Fundy, Minas basin entrance, Cape Sharp, fog alarm improved.

Canadian Coasting Trade.

Following is the full text of the order-in-council passed by the Dominion Government Jan. 13, which was summarized in our last issue: The Governor-General-in-Council is pleased to order that the orders-in-council hereinafter cited, admitting ships or vessels of the following countries to the coasting trade of the Dominion of Canada on the same terms and conditions as are applicable to Canadian vessels, viz.: As to Italy—order-in-council, Aug. 13, 1873. As to Germany—order-in-council, May 14, 1874. As to the Netherlands—order-in-council, Oct. 9, 1874. As to Sweden and Norway—order-in-council, Nov. 5, 1874. As to Austro-Hungary—order-in-council, June 1, 1876. As to Denmark—order-in-council, Jan. 25, 1877. As to Belgium—order-in-council, Sept. 30, 1879, and as to the Argentine Republic—order-in-council, May 18, 1881, shall be and the same are hereby repealed, on, from and after Jan. 1, 1909; and that the exemption existing under the orders-in-council hereby repealed shall cease to apply to the ships and vessels of Italy, Germany, the Netherlands, Sweden and Norway, Austro-Hungary, Denmark, Belgium, and the Argentine Republic, on, from and after Jan. 1, 1909; and that the ships and vessels of each of the said countries, on, from and after the said date shall be subject to the terms of sec. 955 of chap. 113 of the Revised Statutes of Canada, 1906, which provides that no goods or passengers shall be carried by water, from one port of Canada to another, except in British ships."

WOLFE BRUSH COMPANY
JOHN H. HULTS, PRESIDENT



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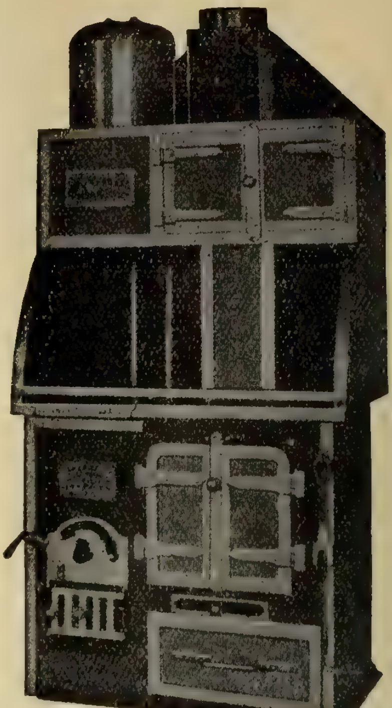

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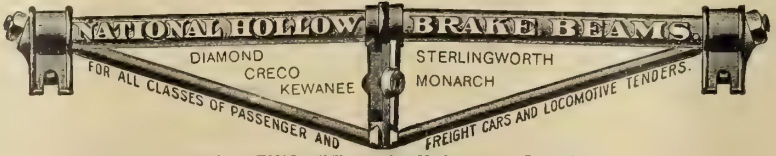
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22 St. John Street
MONTREAL, - QUEBEC

I. A. YOUNG,
AGENT

Trent Valley Canal Contracts.

The following contracts have been let for construction work on the Trent Valley Canal: Brown and Aylmer for sec. 5, Ontario-Rice Lake division, at schedule prices, work to be completed by Nov. 30, 1908; amount of deposit by contractors $27,584. The Randolph Macdonald Co., Ltd., Toronto, at schedule prices, for the Rosedale section, Ontario-Rice Lake division; amount of deposit $10,000. L. P. Nott, for sec. 1, Ontario-Rice Lake division; amount of deposit $43,333. J. Reilly, for sec. 2, Holland River division, amount of deposit $10,000. In giving this information in the House of Commons recently, the Minister of Railways and Canals said although J. Reilly's tender was accepted June 1, 1 07, he had not executed the contract; and L. P. Nott had declined to execute the contract awarded him on account of the fair wage schedule, which he claimed was too high. The Government had not given its consent to the abandonment of any of these contracts, and the question of the forfeiture of the deposit in the two cases particularly referred to would be dealt with when it arose. The contract for section 1 has since been let to Larkin & Sangster, St. Catharines, Ont., and for section 2 to Weddell, Rogers & Dennon, of Trenton and Peterboro. The Randolph Macdonald Co. was notified Jan. 21 to execute the contract, and it has since been announced that this has been done. Their section, the Rosedale one, which is about two miles long, is at the head of Lake Cameron, about five miles north of Fenelon Falls, Ont. It includes a lock, a dam, and some heavy rock excavation and submarine work, and will cost about $300,000. W. R. Macdonald, son of the President of the company, is in charge of the work, on which a start has already been made. Some 20 years ago Randolph Macdonald built a lock and approaches at Fenelon Falls for this canal.

Shipping Federation of Canada.

The fifth annual meeting was held in Montreal Feb. 12, at which were represented the owners of 478,385 tons of shipping, as compared with 475,195 tons for 1906. The President, H. A. Allan, in the course of his address, said: The season of navigation for 1907 was late in opening, and the first vessel did not arrive in Montreal until May 2, and the last ocean vessel left the port Nov. 29. The number of sea-going vessels arriving at Montreal was 742, of a combined tonnage of 1,925,986; compared with 820 vessels in 1906 of a tonnage of 1,973,223; showing a decrease of 78 in number, and 47,237 tonnage. The ocean passenger business of the St. Lawrence season exceeded that of any previous year. The season's business on the whole cannot be considered satisfactory, with unremunerative freight rates, increased labor and port charges.

The lighting of the river and gulf has not only been very much improved, but the attention to lights has left nothing to be desired. The attention of the Department to any defect has been prompt, and the service generally first-class. The Minister of Marine is to be congratulated on the vast improvements he has made in this Department, which, no doubt, has been brought about largely by the formation of the Lighthouse Board. It is a matter of great satisfaction to the Federation to learn from the Minister that it is his intention to continue the widening and deepening of the channel between Montreal and the sea. After the present scheme is complete, and in order to expedite the work as much as possible, further dredging plant will be provided. The work of improving the ship channel has, during the past season, progressed satisfactorily, and a large amount of dredging was done between Montreal and Quebec, and also below Quebec. The work of providing a 30 ft. channel has been going on for a number of years, and the object is to get that depth to the sea at low tide, a distance of 340 miles. In order to obtain this, 70 miles of the channel required dredging, and at the end of last season 56 miles had been completed, while during the past season four miles more was dredged, leaving only 10 miles to complete the channel to the sea. During the past season the depth of water in the ship channel had been unusually high, and no difficulty had been experienced by any vessel to load to the full draught desired, and the lowest water recorded was 31 ft. 8 in. Sept. 21.

While realizing the difficult task the new Harbor Commissioners of Montreal had undertaken, and the able manner in which they have carried out the work of building the new permanent sheds on the wharves during the past season, Mr. Allan thought it well to put on record the unanimous opinion of the Federation as expressed to the Commissioners, viz., that while the sheds are under course of construction the extra expense in handling steamers has been very serious, and that some concession should be granted the regular lines by the Commissioners while this work is in progress. The new and increased charges for rentals for these sheds have come as a heavy burden upon the shipping interests, and this tax, put forward at a time when so many extra expenses are being incurred, will not be conducive to the development of the port. It has been found by all the lines that during the past season the cost of handling steamers at the new sheds has been very heavy, and the unavoidable interference with economical handling, owing to the construction that is going on, has been a great tax on shipping. The space outside the ground floors of the sheds formerly used for storing coarse goods has now been allotted to railway tracks and roadways, and in the absence of any means of reaching the upper stories the space at the disposal of the lines has been considerably curtailed. It would therefore seem reasonable that the rentals should be suspended until the construction of the new sheds is completed. The Montreal port charges for the voyage of a vessel are $542.64 higher than those of New York, and $1,959.07 and $1,883.52 greater than those of Portland and Boston, respectively.

The following officers were elected for the current year: President, H. A. Allan; Secretary, T. Robb; Treasurer, J. R. Binning; Executive Council: J. Thom, Chairman; H. A. Allan, A. A. Allan, D. W. Campbell, W. R. Eakin, R. W. Reford, and F. L. Wanklyn.

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A press report states that the Canadian Northern Ry. Co. has recently sold 100,000 acres of farm lands in Manitoba, at $10 an acre.

Express Companies' Liability for Damage.

In the case of Thiaville vs. the Canadian Ex. Co., for $262 contingent damages, alleged to have been sustained through the failure of the company to deliver a valve for a pump, utilized by plaintiff on a ferry plying between Lachine and Caughnawaga, Justice Archibald in delivering judgment said: "The main question to be decided is whether the plaintiff can recover for such damages as he claims in this action. The article 1073 of the Civil Code provides that the damages due to the creditor are in general the amount of the loss which he has made, or of the profit of which he has been deprived, saving the exceptions and modifications contained in article 1074 of the Civil Code: 'The debtor is only bound for the damages which have been foreseen, or could have been foreseen at the time when the obligation was contracted, when it is not in consequence of a fraud that the obligation was not executed. Even in the case where the inexecution of the obligation results from the fraud of the debtor, the damages comprise only what is the immediate and direct consequence of the inexecution of the obligation.' It has already been said that the defendant at the time of receiving the valve in question knew nothing about the nature of its use or the loss which would result to the plaintiff by reason of his being deprived of its use. It is difficult to say that such damages as these which the plaintiff now claims could be considered as damages which could have been foreseen by the defendant at the time of the contract. Are they even such damages as are the direct and immediate consequence of the failure of defendant to safely convey and deliver the article in question? It is, of course, clear that the plaintiff must have expected to have been deprived of the valve for a certain space of the time necessary for the carriage from Lachine to Sorel for

THE CANADIAN EXPRESS COMPANY'S NEW BUILDING, MCGILL STREET, MONTREAL.

the manufacture of a new valve, and for the return of the new valve from Sorel to Lachine.

"Now, it is a principle in the estimate of damages that a person who claims the inexecution of an obligation which causes damages, must himself be active and must adopt such measures as to minimize as much as possible the damage which he suffers. If he does not do so, the immediate cause of his damages is not the inexecution of the obligation by his debtor, but his own carelessness and negligence in the management of his business. Supposing one week to have been sufficient for the return of the new valve, the plaintiff ought to have promptly thereafter put the defendant in default, and if the defendant gave no satisfaction to his demands, the plaintiff ought to have provided himself either with a new valve for his old pump, or if that could not be done in the open market he could have got a new and better pump in place of the old one, for the sum of $50. In this case, if the plaintiff had promptly taken action possibly he might have had a claim against the defendant for the price of the new pump, although the article carried and lost was of no value. He did not do so. He appears to have continued running his boat the whole of the season with what he calls the temporary arrangement of a syphon to replace the valve in question. At any rate, he bought no new pump; he did not even, in any effectual way, notify the defendant, even verbally, until after, at least, a month, and he did not notify him in writing until after the expiry of more than four months from the delivery of the valve to the defendant. The article of our code requiring that

THE CANADIAN PACIFIC RAILWAY COMPANY.

Dividends for the half-year ended 31st December, 1907, have been declared as follows:

On the Preference Stock, Two per cent.
On the Common Stock, Three per cent.

A further sum equal to one-half of one per cent. on the Common Stock will be paid thereon at the same time out of interest on the proceeds of land sales.

Warrants for the Common Stock dividend will be mailed on 31st March next, to Shareholders of record at the closing of the books in Montreal, New York and London respectively.

The Preference Stock dividend will be paid on Wednesday, April 1st next, to Shareholders of record at the closing of the books at the Company's London Office, No. 62 Charing Cross, London, S. W. The Common Stock Transfer Books will close in Montreal New York and London, at 3 p.m. Tuesday, March 10th. The Preference Stock Books will also close at 3 p.m. on Tuesday, March 10th.

All books will be re-opened on Thursday, 2nd April next.

By order of the Board,
CHARLES DRINKWATER,
Secretary.
Montreal, 10th February, 1908.

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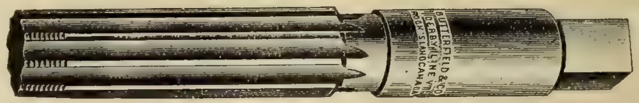

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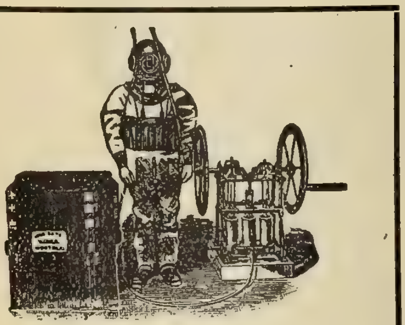

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Or F. S. Bishop, G.E.P.A., 333 Broadway, New York City.

NOTICE

is hereby given that the Annual Meeting of the Shareholders of the **VICTORIA ROLLING STOCK COMPANY OF ONTARIO, LIMITED**, will be held at the office of Messrs. Osler & Hammond, 21 Jordan Street, Toronto, on **WEDNESDAY, 4TH MARCH, 1908, AT 12 O'CLOCK NOON**, for the reception of the Annual Report and election of directors for the ensuing year.

By order,
R. A. SMITH, Secretary.
Toronto, Feb. 5, 1908.

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the measure of damages of the inexecution of an obligation shall not exceed those which could have been foreseen at the time of the contract, and shall be the direct and immediate consequence of the breach of the obligation, is not new law; it is the obligation of the general law. I must decide that the damages claimed by the plaintiff are neither the direct and necessary consequence of the breach of contract on defendant's part, nor are they damages which either were, or could have been, foreseen by the defendant at the time of and under said contract. I am, therefore, of opinion that the plaintiff's action is unfounded and must be dismissed with costs."

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Among the Express Companies.

The Dominion Ex. Co. has opened an office at Lanagan, Sask.

The Canadian Ex. Co. has closed its offices at Cardwell Jct., Ont., and at Belle Isle, N.B.

R. Murray has been appointed acting agent Dominion Ex. Co., at Sault Ste. Marie, Ont., vice J. Bayley, promoted.

F. G. McKenzie, heretofore route agent Dominion Ex. Co., has been appointed acting agent, London, Ont., vice A. E. Berube.

J. Bayley, heretofore agent Dominion Ex. Co., Sault Ste. Marie, Ont., has been appointed route agent, with headquarters at Montreal.

The position of special agent of the Canadian Ex. Co. has been abolished, consequent on the recent death of J. Robertson, who was for many years in the company's service.

The Great Northern Ex. Co. (U.S.) has extended its service on the extension from Walhalla, N.D., to Morden, Man., and has established offices at Haskett, Glencross and Morden.

The Canadian Ex. Co. has extended its service over the Quebec and Lake St. John Ry.'s branch between La Tuque Jct. and La Tuque, Que. The Canadian Northern Ex. Co.'s service is already in operation over this line, the two companies making a common centre at La Tuque.

An amendment to the Assessment Act is being considered at the current session of the Ontario Legislature, under which it is desired to render express companies liable to taxation in places where they do business through the railway companies' station agents. By a recent decision of the Ontario courts express companies are not assessable under the Ontario act where they do business through station agents, as the business is done mainly by the railways. The amending bill was introduced by W. H. Hoyle, M.L.A. for North Ontario.

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The Mackay Companies.

The annual meeting of the Mackay Companies, comprising the Commercial Cable Co., the Postal Telegraph Co., and owning in whole or part other telegraph, cable and telephone companies, was held at New York, Feb. 15. The report shows that outstanding preferred shares, $50,000,000, and common shares, $41,380,400, have not been increased during the year. Dividends have been paid on both the preferred and common stock at the rate of 4% per annum. The submarine cable between New York and Havana, which was opened for business Oct. 21, 1907, the entire cost of which was paid out of current profits, has proved to be of satisfactory earning capacity The balance sheet shows a balance of assets over liabilities of $880,470.69; while in the profit and loss account a balance of $152,923.47 is carried forward.

Telegraph and Cable Matters.

The Canadian Northern Telegraph Co. has opened an office at Lamzant, Alta.

The annual convention of the Association of Railway Telegraph Superintendents will be held at Montreal, June 24, 25 and 26.

Jno. Luxon, a former C.P.R. telegraph operator at Montreal, and latterly connected with the Associated Press at Worcester, Mass., died there recently, aged 50.

The Allan Steamship Line has four, and the Dominion Steamship Line three, of its vessels equipped with the necessary apparatus for wireless communication with shore stations.

The G.T. Pacific Ry. telegraph line to Winnipeg has been completed. The line from Portage la Prairie westward has been in operation for some time, for construction purposes.

The Intercolonial Ry. telegraph operators recently had a conference with the Minister of Railways, and D. Pottinger, General Manager, I.C.R., respecting a readjustment of the wages scale

The question of the permanent improvement of the Yukon Telegraph line, more particularly that section between Hazelton and Prince Rupert, B.C., is under the consideration of the Department of Public Works.

The C.P.R. Telegraph Department has opened offices at Burmis, Alta.; has closed those at Harding, Headingly and Wood Bay, Man., and changed the names of Selkirk (East) and West Selkirk, Man., to East Selkirk and Selkirk respectively.

At a Canada Club dinner in London, Eng., recently, G. Marconi said that the wireless telegraph system in use on the St. Lawrence was unequalled, and that he would not spare any effort to show that the encouragement granted him by Canada was not thrown away.

The C.P.R. has decided that all its vessels engaged in the Atlantic service shall be equipped with the Marconi wireless apparatus, and contracts have been made for the installations at an early date. The Empress boats are already fully equipped for communication with shore stations.

The Marconi Wireless Telegraph Co. opened its Montreal office for the receipt of general commercial messages Feb. 4. A flat rate of 15c. a word is charged, covering transmission over land lines from Montreal to Glace Bay, and from Clifden, Ireland, to destination. A number of messages were transmitted, and a reply was received from London, Eng., within two hours.

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Railway Telegraph Lines in Canada.

The following table shows the mileage of telegraph lines operated by the various railway companies, and the telegraph lines along railway lines operated by other companies for the year ended June 30, 1907. The mileage of telegraph lines is distributed as follows:

	Operated	
	By Company.	By Other Comp'y
Alberta Ry. and Irrigation Co.	66.21	
Bay of Quinte Ry.	20.00	59.00
Bedlington and Nelson Ry.	23.87	
British Yukon Ry.	90.32	
Brockville, Westport and North Western Ry.		45.00
Brandon, Saskatchewan and Hudson's Bay Ry.	69.44	69.44
Canada Southern Ry.	3.79	343.80
Canadian Government Railways: Prince Edward Island Ry.	263.90	206.20
Canadian Northern Ry.	2,639.40	
Canadian Northern Ontario Ry.	149 00	
Canadian Northern Quebec Ry.	43.00	
Canadian Pacific Ry.	10,615 00	1,081.00
Crow's Nest Southern Ry.	52 48	
Cumberland Ry. and Coal Co.	32.00	
Dominion Atlantic Ry.	82 44	169.68
Esquimalt and Nanaimo Ry.	78.00	
Grand Trunk Ry.	6,422.08	
Halifax and Southwestern Ry.	318.70	50.20
Inverness Ry. and Coal Co.	61.00	
Kaslo and Slocan Ry.	28.80	
Kingston and Pembroke Ry.		103.40
Klondike Mines Ry.	31.50	
Lake Erie and Detroit River Ry.		150.50
Massawippi Valley Ry.		35.46
Montreal and Province Line Ry.		40.00
Montreal and Vermont Junc. Ry.		23.60
Midland Ry. of Manitoba	38.35	38.35
New Brunswick Southern Ry.		35.00
New Westminster Southern Ry.		24.09
Ottawa and New York Ry.	60.00	
Princeton Branch Washington Co. Ry.		5.10
Qu'Appelle, Long Lake and Saskatchewan Ry.	250.02	
Quebec, Montreal and Southern Ry.	88.00	88.00
Red Mountain Ry.		55.00
Rutland and Noyan Ry.		3.39
Salisbury and Harvey Ry.		45.00
Stanstead, Shefford and Chambly Ry.		43.00
St. Lawrence and Adirondack Ry.		46.12
Temiskaming and Northern Ry.	139.00	103.00
Toronto, Hamilton and Buffalo Ry.		79.88
Vancouver, Victoria and Eastern Ry.		77 47
Vancouver, Westminster and Yukon Ry.	14.81	
Vancouver Copper Co.	12.00	
Total miles	21,693.11	3,073.53

◆

The G.T.R. and Its Telegraphers.

The investigation board recently enquiring into the G.T.R. telegraph operators' wage question, consisting of Prof. A. Shortt, W. Nesbitt, K.C., and J. G. O'Donoghue, in issuing its report, says: "The board were much impressed by the suggestions that the same board had recommended a higher rate of pay to the C.P.R. telegraphers than they were prepared to recommend in the present instance. We are glad to be able to report that the parties appreciated the reasons why the board could not in this instance see their way to the recommendation of any higher rate than that finally agreed upon between the parties, and we desire to put upon record some of the reasons why we came to this conclusion.

"We thought, under the present conditions, that the company's offer in the matter of increase of wages was all that could be justified. There are many considerations entering into the question. In our view, there is the right of the men to receive a living wage, and that right is paramount. The workman is entitled to get a fair day's wage for a fair day's work. What, however, often seems to be ignored is that capital and labor are both necessary in order to produce a profit, whether it is in the operation of railways, in manufacturing, or in any other branch of trade. The aim of the worker should be to secure a fair share of this profit. But there is also to be considered the position of the man who advances the money to enable the undertaking to be carried on which gives employment. He, too, is entitled to receive a return for his money and his risk.

"A hundred millions of the G.T.R. capital stock receives no dividend whatever. If such dividends on the preferred stock as are now being paid are still further reduced by the wages bill being increased, what must necessarily follow? The company cannot obtain further money for expansion, for it can be more remuneratively employed in other undertakings. This certainly would be a disadvantage to the vast numbers who find employment on railways. Then there is the constant demand of the public for the betterment of the service and equipment, for increase of facilities, the bettering of the roadbed and general improvement in the accommodations. These can only be obtained where the parties asked to advance the money can see some possibility of return for the advance.

The North American Life Assurance Company

Held its Annual Meeting at its Home Office, in Toronto, on Thursday, the 30th day of January, 1908. The President, Mr. John L. Blaikie, was appointed Chairman, and the Managing Director, Mr. L. Goldman, Secretary, when the following report of the business of the Company for the year ended December 31st, 1907, was submitted:

New Business The policies issued for the year, together with those revived, amounted to the sum of $4,622,635.00, being greater than the new business transacted for the previous year.

Saving in Expenses The business has continued to be conducted on a conservative basis, resulting in a further reduction in the ratio of expenses to premium income of over two per cent. This percentage of reduction has resulted in a material saving in expenses of $26,918.17, as compared with 1906.

Cash Income The cash income for the year from premiums, interest, etc., was $1,815,097.69, showing the satisfactory increase for the year of $68,553.69.

Payments to Policyholders The amount paid on policyholders' account was $607,347.44, and of this amount the sum of $266,825.95 represents payments for dividends, matured endowments and investment policies.

Assets The assets increased during the year by the sum of $936,811.63, and now amount to $8,735,876.08.

Net Surplus Increased After making ample provision for all liabilities, including the special Contingent Fund of $155,173.35 to provide for the temporary depreciation in the value of debentures, bonds and stocks, and paying the sum of $97,304.79 for dividends to policyholders during the year, there was an addition made to the net surplus which now amounts to $673,556.04, the year's work from every standpoint being highly satisfactory.

Assets Safely Invested The assets of the Company continue to be, as heretofore, invested in the best class of securities; a detailed list of these will be published with the Annual Report for distribution.

Monthly Audit A monthly examination of the books of the Company was made by the auditors, and at the close of the year they made a thorough scrutiny of all the securities held by the Company. In addition to the examination of the securities by the Auditors, a committee of the Board consisting of two Directors, made an independent audit each quarter.

The Officers, Field Representatives and Office Staff deserve to be commended for their efficiency and diligence.

L. GOLDMAN,
Managing Director.

J. L. BLAIKIE,
President.

The Annual Report showing marked proofs of the solid position of the Company, and containing a list of the securities held, and also those upon which the Company has made collateral loans, will be sent in due course to each policyholder.

New and Relaying
RAILS

FOR RAILWAYS, TRAMWAYS, GIRDERS, ETC.

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REDWOOD LAGER.

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LIMITED,
SHEFFIELD, ENGLAND.
STEEL AXLES, TYRES, AND SPRING STEEL.

"PHŒNIX" Loco. Spring Steel is the accepted Standard in Canada.

SOLE AGENTS:
James Hutton & Co., Montreal.

MAIL JOB PRESS TORONTO

TRANSPORTATION PRINTING

"Our experience on a number of these boards has led us to the conclusion that there seems to be an oversight on the part of the public of two things: First, that there is a continual demand for an increase of expenditure upon the part of the company for facilities, and, second, a continual demand for a reduction of the tariffs which furnish the monies necessary to provide these facilities and accommodations. The growth of earnings is not keeping pace proportionately with the growth of expenses. If the operating expenses and the wages to employes must be increased from time to time, and the public so demand, very serious considerations must be given to the proposals for the reduction of freight and passenger rates, inasmuch as every reduction directly affects the ability of the railways to pay the wages asked by their employes. There is no doubt that the cost of living has greatly increased and that the employes of a railway company are entitled to be better compensated to meet such increased cost, but surely they are not entitled to be compensated at the sole expense of people who have invested their money and who would in return be deprived of their means of livelihood.

"The public should bear their share. The railway employe spends his money for the benefit of every other member of the community from farmer to manufacturer, and if the employe has to obtain more money to meet his increased cost of living, other classes of the community who receive the benefit of the money he spends should contribute their share towards enabling him to get the money he has to spend; and it is for the foregoing reasons that, under the present conditions and having in view all the surrounding circumstances, we thought that the offer of increase made by the G.T.R. had gone as far as could be justified, though not necessarily to the limit which the telegraphers ought to receive under other circumstances.

"The deterring of the investment of capital in railway undertakings would certainly not be a benefit to the community at large, and if the property of lenders is to be practically confiscated between the demand of the public on the one side, and the demand of the employes on the other, it must lead to a general reduction in wages or a shrinkage in the number of employes, with a much greater ultimate loss to labor. It has been suggested that this state of affairs may be met by the state becoming sole owner of the railways. To accomplish this the capital necessary to make railways and work them would still have to be found. The mere fact of state ownership does not bring capital down from the skies like the manna to the Israelites in the desert. If borrowed by the state, interest must be paid for it, and probably at a higher rate than the state now has to pay, for two reasons, first, because of being larger borrowers; second, because of the risk incident to industrial undertakings. If raised by taxation, this would be nothing more than getting it from the collective resources of the country. The wages, other than the living wage before referred to, which are paid by railway companies to their employes must therefore, disguise it as we may, depend upon what a company earns after the interest on capital employed is paid. This may equally be said of all industrial and commercial undertakings, and no amount of vague philanthropic talk can alter this fact any more than it can alter the fact that two and two make four."

The award made by the Board was given in our Feb. issue.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Advertising Matter
Valentine & Sons Publishing Co..........Montreal.

Aerated Waters
E. L. Drewry........................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co...................Toronto.
Canadian Westinghouse Co.....Hamilton, Ont.

Ales
E. L. Drewry........................Winnipeg.

Angle Bars
Hamilton Steel & Iron Co.......Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co........Racine, Wis.

Automobiles
Polson Iron Works, Ltd ....Toronto.

Axes
James Smart Mfg. Co...........Brockvilie, Ont.

Axe Steel
Montreal Steel Works..................Montreal.

Axles
James Hutton & Co.....................Montreal.
Jas. W. Pyke & Co.....................Montreal.
Rhodes, Curry & Co..............Amherst, N.S.
Taylor & Arnold.......................Montreal.

Badges
R. Woodman Mfg. & Supply Co....Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co....Boston, Mass.

Bearings, Side
Chicago Railway Equipment Co.....Chicago, Ill.

Blankets and Bedding
The Hudson's Bay Co..........................

Blasting Powder
Standard Explosives Limited...........Montreal.

Boilers
Babcock & Wilcox (Ltd.)..............Montreal.
Canada Foundry Co.....................Toronto.
Jno. McDougall, Caledonian Iron Works Co. Montreal
Polson Iron Works.....................Toronto.
Robb Engineering Co..............Amherst, N.S.

Boilers, Internally Fired
Robb Engineering Co..............Amherst, N.S.

Boilers, Portable
Canada Foundry Co.....................Toronto.
Robb Engineering Co..............Amherst, N.S.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co..............Amherst, N.S.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co..............Amherst, N.S.

Boilers, Water Tube
Babcock & Wilcox (Ltd.)..............Montreal.
Jno. McDougall, Caledonian Iron Works Co. Montreal
Robb Engineering Co..............Amherst, N.S.

Boilers Tubes
Jas. W. Pyke & Co.....................Montreal.

Bolsters
Dominion Car and Foundry Co........Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited.......................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.
N. J. Holden Co., Ltd.................Montreal.

Brass and Copper Cloth
The B. Greening Co............. Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited ....Toronto.

Bridges
Canada Foundry Co.....................Toronto.
Canadian Bridge Co...........Walkerville, Ont.
Dominion Bridge Co....................Montreal.
Steel Concrete Co. (Ltd.).............Montreal.

Buckets, Coal, Ore and Concrete
Kilgore-Peteler Co...........Minneapolis, Minn.

Bumping Posts
McCord & Co.......................Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co..New York.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co.................Montreal.

Caboose Heaters
Geo. R. Prowse........................Montreal.

Car Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Car Cleaner
Modoc Soap Co................Philadelphia, Pa.

Car Closets
Duner Co.........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd.................Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co..New York.
Canadian Gold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co...New York.
Peter Smith Heater Co............Detroit, Mich

Car Jacks
F. H. Hopkins & Co....................Montreal.
Mussens Limited.......................Montreal.

Car Kitchen Equipments
Geo. R. Prowse........................Montreal.

Car Lighting
Bliss Electric Car Lighting Co...Milwaukee, Wis.
Consolidated Ry. Electric Light. & Equip. Co., N.Y.
Canadian Cold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
F. H. Hopkins & Co....................Montreal.
Mussens Limited.......................Montreal.
R. Woodman Mfg. & Supply Co ....Boston, Mass.

Car Ranges
Geo. R Prowse.........................Montreal.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd.................Montreal.
F H. Hopkins & Co.....................Montreal.

Car Seals
R. Woodman Mfg. & Supply Co.....Boston, Mass.

Car Wash Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Cars
Canada Car Co., (Ltd) ....Montreal, Que.
Crossen Car Mfg. Co.............Cobourg, Ont.
Dominion Car and Foundry Co........Montreal.
J. T. Gardner.....................Chicago, Ill.
Hart-Otis Car Co. (Ltd.) ....Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Rhodes Curry & Co...............Amherst, N.S.

Cars, Coal
Kilgore-Peteler Co...........Minneapolis, Minn.

Cars, Mine
Kilgore-Peteler Co...........Minneapolis, Minn.

Car Windows
O. M Edwards..................Syracuse, N.Y.

Castings
Crossen Car Mfg. Co.............Cobourg, Ont.

Castings, Brass
Canadian Bronze Co....................Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co...............Walkerville, Ont.
St. Thomas Brass Co..........St. Thomas, Ont.

Castings, Iron
Canada Car Co., Ltd..... ....Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co...............Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co..Mahwah, N.J.

Castings, Malleable
Taylor & Arnold.......................Montreal.

Castings, Steel
Canadian Iron and Foundry Co........Montreal.
Montreal Steel Works..................Montreal.
Rhodes Curry & Co...............Amherst, N.S.

Cast-Steel Hammers
American Brake Shoe & F'dry Co..Mahwah, N J.

Cast-Steel Track Tools
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cast-Steel Wrenches
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cement Machinery
Jas. W. Pyke & Co.....................Montreal.

Chains
B J. Coghlin & Co.....................Montreal.

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LIMITED
MONTREAL STEEL WORKS
LIMITED
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SPECIALLY RECOMMENDED FOR
TAPS, DIES, PUNCHES, CHISELS, SCREW-CUTTING TOOLS, ETC.
Combines toughness and durability with a cutting power superior to highest grades of carbon steel, at less price.
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RAILWAY Lamps, Signals and Supplies.
MARINE Lamps, Search Lights and Supplies.
ELECTRIC Reflectors for Store Lighting.

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and
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CAPITAL PAID UP - - 4,880,000.00.
REST - - - - - 4,880,000.00.

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Provinces of Ontario, Quebec, Manitoba, Saskatchewan, Alberta and British Columbia.
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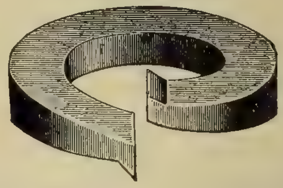

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Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Chimneys
Steel Concrete Co. (Ltd.)..............Montreal.

Coal Haulage Ropes
The B. Greening Co..............Hamilton. Ont.

Coal Storage Plants
Steel Concrete Co. (Ltd.)..............Montreal.

Concrete Mixers and Rock Crushers
Goold, Shapley & Muir Co........Brantford, Ont.
F. H. Hopkins & Co...................Montreal.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co...............Toronto.

Concrete Pipe
Steel Concrete Co. (Ltd.)..............Montreal.

Contractors' Plant
M. Beatty & Sons................Welland, Ont.
J. T. Gardner....................Chicago, Ill.
F. H. Hopkins & Co...................Montreal.
The W. H. Kelson Co..................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co...............Toronto.

Contractors' Supplies
F. H. Hopkins & Co...................Montreal.
Rice Lewis & Son......................Toronto.
Toronto Pressed Steel Co...............Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.)..............Montreal.

Cooking Apparatus
Geo. R. Prowse.......................Montreal.

Copperware
Geo. R. Prowse.......................Montreal.

Copying Presses
James Smart Mfg. Co..........Brockville, Ont.

Cordage
M. McKenzie Co., Limited..............Montreal.

Corrugated Furnaces
Continental Iron Works..........Brooklyn, N.Y.

Cotton Duck
M. McKenzie Co., Limited..............Montreal.

Counter Dusters
Wolfe Brush Co..................Pittsburg, Pa.

Couplers, Car and Locomotive
Latrobe Steel & Coupler Co.....Philadelphia, Pa.
McConway & Torley Co............Pittsburg, Pa.
National Malleable Castings Co...Cleveland, Ohio.
Washburn Steel Castings & Coupler Co.,
........................Minneapolis, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co..........Toronto.

Cross Arm Braces
Canadian General Electric Co..........Toronto.
Toronto Bolt and Forging Co..........Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co......Toronto.

Crowbars
B. J. Coghlin & Co...................Montreal.
Toronto Bolt and Forging Co..........Toronto.

Culverts
Steel Concrete Co. (Ltd.)..............Montreal.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co, Hamilton.

Cuts
Acton Burrows Limited................Toronto.

Derailing Devices
Hayes Track Appliance Co.........Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co................Montreal.
The B. Greening Co.............Hamilton, Ont.

Derricks
M. Beatty & Sons................Welland, Ont.
Miller Bros. & Toms..................Montreal.
Mussens Limited.....................Montreal.

Dies
Butterfield & Co.............Rock Island Que

Diving Outfits
John Date...........................Montreal.
Mussens Limited.....................Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards..................Syracuse, N.Y.

Door Signs
Acton Burrows Limited................Toronto.

Draft Gear
Farlow Draft Gear Co...........Baltimore, Md.
McCord & Co......................Chicago, Ill.
Standard Coupler Co............New York City.

Drawing Materials
Eugene Dietzgen Co., Ltd..............Toronto.
James Foster..........................Toronto

Dredges
M. Beatty & Sons................Welland, Ont.

Drills
W. Abbott............................Montreal

Drills, Twist
Baldwin Steel Co....................New York.

Dry Goods
The Hudson's Bay Co..........................

Dump Cars (Contractors')
F. H. Hopkins & Co...................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Toronto Pressed Steel Co...............Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.)..............Montreal.

Electric Car Route Signs
Acton Burrows Limited................Toronto.

Electric Cranes
Babcock & Wilcox.....................Montreal.
Canada Foundry Co.....................Toronto.
Dominion Bridge Co...................Montreal.
Mussens Limited.....................Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co...Mahwah, N J.

Electrical Fuses
Standard Explosives Limited..........Montreal.

Enameled Iron Signs
Acton Burrows Limited................Toronto.

Engineers' Supplies
Canadian Fairbanks Co................Montreal.

Engines, Automatic
Robb Engineering Co............Amherst, N.S.

Engines, Corliss
Robb Engineering Co............Amherst, N.S.

Engines, Gasoline
Canadian Fairbanks Co................Montreal.
Goold, Shapley & Muir Co........Brantford, Ont.
Ontario Wind Engine and Pump Co.....Toronto.

Engines, Hoisting
M. Beatty & Sons................Welland, Ont.

Engines, Stationary and Marine
Polson Iron Works.....................Toronto.
Robb Engineering Co............Amherst N.S.

Explosives
Standard Explosives Limited..........Montreal.

Express Office Signs
Acton Burrows Limited................Toronto.

Feedwater Heaters
Canadian Fairbanks Co................Montreal.
Robb Engineering Co............Amherst, N.S.

Fencing
Banwell-Hoxie Fence Co.........Hamilton, Ont.
Canada Foundry Co.....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Fire Brick
Mussens Limited.....................Montreal.
F. B. Stevens....................Detroit, Mich.

Fire Clay
F. B Stevens.....................Detroit, Mich.

Flags
The Hudson's Bay Co..........................

Flour
The Hudson's Bay Co..........................

Forgings
Canada Car Co., Limited..............Montreal.
Crossen Car Mfg. Co.............Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.
Standard Steel Works..........Philadelphia, Pa.

Foundry Facings
F. B. Stevens....................Detroit, Mich.

Foundry Supplies
F. B. Stevens....................Detroit, Mich.

Fuse Batteries
Standard Explosives Limited..........Montreal.

Fuse Detonators
Standard Explosives Limited..........Montreal.

Gaskets
McCord & Co......................Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Gates
Banwell-Hoxie Fence Co.........Hamilton, Ont.
Canada Foundry Co.....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Glue Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co...............Chicago, Ill.

Groceries
The Hudson's Bay Company....................

Hammers
James Smart Mfg. Co..........Brockville, Ont.

Handcars
Crossen Car Mfg. Co.............Cobourg, Ont.
F. H. Hopkins & Co...................Montreal.
Mussens Limited.....................Montreal.
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RAILWAY ELECTRIFICATION.

By H. L. Kirker, Resident Engineer, W. E. & M. Co., St. Clair Tunnel.

This paper was written in the form of questions and answers. To save space we have omitted the questions, summarizing them where necessary to the context.

ELECTRIFICATION—WHY IT IS BEING DONE.

There are enthusiasts who maintain that an electric locomotive can do for a dollar what a steam locomotive does for two. There are moderates who believe that dollar for dollar is the ratio. There are pessimists who do not believe that the electric locomotive can do as much for a dollar as a steam locomotive can do for the same amount. However, as has frequently been pointed out, the primary object of electrification is not to reduce operating expenses, but to improve the service and increase the capacity. Vice-President McHenry, of the New York, New Haven & Hartford (formerly Chief Engineer of the C.P.R.), says that under general conditions it is altogether improbable that the saving resulting from the simple substitution of electric for steam power will be sufficient to justify the additional investment and financial risk.

It is the opinion of railway men that steam roads are reaching the limits of their capacity. According to J. J. Hill's estimate of a year ago, 75,000 miles of new track were then needed to relieve the traffic congestion. E. H. Harriman has gone on record to the effect that an increase of capacity is a vital necessity, that electrification is the solution, and that the increase in capacity resulting from electrification will be accompanied by a great saving. Vice-President Brown, of the New York Central, believes that at the country's present rate of growth it will be necessary to spend as much towards increasing capacity of the present railways during the next ten years as has been spent in creating these railways. With reference to the present shrinkage of business, President Delano, of the Wabash, says he believes the low water mark has been reached, and that the business of the country will improve from now on.

The limits of the capacity of the steam service are first reached in terminals, on heavy grades and in tunnels.

Assuming that terminals, grades, and tunnels have in certain cases reached the limits of their capacity under existing steam conditions, there are those who believe that the steam locomotive has reached its limits as a commercial machine. It is doubtful whether the additional weight incident to increase in boiler capacity and the additional refinement incident to mechanical stoking, feed water heating, super-heating, and compounding can justify themselves. This straining of steam locomotive design to get increased capacity merely produces a machine of half the maximum capacity, easily attained in electric locomotive design.

Assuming the steam locomotive to have reached its limits of draw bar pull and speed, and assuming a case where the terminals and tracks equipped with block signals have reached the limits of their capacity under steam conditions, the alternatives are to enlarge the terminals and lay down additional tracks or replace steam locomotives with electric locomotives that can handle heavier trains and at the same time increase the schedule speed. The cost of the new tracks and the cost of the terminal extensions, however, may easily exceed the cost of the electrification that will give an equal increase in capacity.

EDWARD A. EVANS, C.E.,
General Manager Quebec Railway, Light and Power Co., and President Canadian Street Railway Association.

The electric locomotive can give a heavier pull at high speed than the steam locomotive can give. The electric locomotive is a more powerful high speed machine than the steam locomotive. It is essentially a driving mechanism, fed from a central station of many times the capacity required to handle the train. The elimination of the generating plant from the locomotive makes room for a bigger prime mover and allows the weights to be so disposed as to increase the adhesion. The outside source of supply means that the motor can give a powerful pull through its entire range of speed. The steam locomotive is an isolated power station whose capacity is limited by the area of the heating surface of its boilers. It can exert a powerful pull at slow speed, but (to quote Mr. McHenry again) "there are few locomotives that can generate sufficient steam to use their full cylinder capacity at speeds in excess of 12 miles per hour." He adds that "an increase in speed beyond certain limits can only be attained by decrease in tonnage of train. The high cost of fast freight service is due to this."

The Mallet articulated compound built for the Baltimore and Ohio Rd. is one of the biggest steam locomotives ever built. It weighs 167 tons without tender. All the weight is on the drivers. It has a continuous capacity of 71,500 lbs. draw bar pull at 10 miles an hour (1,900 h.p.). A more recent Mallet, built for the Erie, for mountain service, weighs 205 tons, has 16 drivers, and can give a draw bar pull of 94,800 lbs., working simple. A maximum power Pacific type freight engine weighs 109 tons, exclusive of tender. Sixty-seven tons of this weight are on the drivers. The locomotive has a continuous capacity of 33,500 lbs. draw bar pull at 18 miles an hour (1,600 h.p.). A recent maximum type Pacific passenger engine has 86 tons on the drivers and can develop a draw bar pull of 32,000 lbs. A maximum power compound Atlantic type locomotive weighs 100 tons without tender. Fifty-five tons of this weight are on the drivers. The engine has a continuous capacity of 20,500 lbs. draw bar pull at 25 miles an hour (1,360 h.p.). A maximum power consolidation locomotive weighs 96.5 tons without tender. Eighty-five tons of this weight are on the drivers. The locomotive has a continuous capacity of 42,500 lbs. draw bar pull at 9 miles an hour (1,020 h.p.). The most powerful simple freight engine built in 1907 has a draw bar pull of 60,000 lbs.

The New York Central direct current third rail passenger locomotive weighs 95 tons. Of this weight 70 tons are on the drivers. It has a nominal capacity of 2,200 h.p. at 40 miles an hour. Its maximum capacity is 3,000 h.p. It can give a maximum draw bar pull of 34,000 lbs. before slipping its wheels.

The New York, New Haven & Hartford single phase passenger locomotive weighs 85 tons. All the weight is on the drivers. Its nominal capacity is 1,000 horse power. It can give a draw bar pull of 42,500 pounds.

The G.T.R. St. Clair Tunnel single phase freight locomotive (double header) weighs

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ELECTRIC LOCOMOTIVE USED IN THE G.T.R. ST. CLAIR TUNNEL.

125 tons. All the weight is on the drivers. The locomotive has a nominal rating of 1,500 h.p. It can haul a 1,000 ton train up a 2% grade at 10 miles an hour. It can give a draw bar pull of 80,000 lbs. before slipping its wheels.

The 15 cycle experimental single phase locomotive (double header) made for the Pennsylvania Railway weighs 140 tons. One hundred tons of this weight are on the drivers. The locomotive has a continuous capacity of 9,200 lbs. draw bar pull at 61 miles an hour (1,500 h.p.), and one hour capacity 14,700 lbs. draw bar pull at 51 miles an hour (2,000 h.p.), a maximum draw bar pull of 48,000 lbs. and maximum capacity of 3,000 h.p. The three phase locomotive of the Italian State Railways weighs 95 tons. All of the weight is on the drivers. The nominal rating of the locomotive is 2,250 h.p. The maximum draw bar pull is 47,500 lbs. Mr. Armstrong says that the great claim for recognition of the electric locomotive lies in its great horse power output, its ability to carry full tractive effort, or slip its wheels at speeds two or three times greater than can be done with any steam locomotive yet built. Four motor equipments can be built to deliver a draw bar pull of 56,800 lbs. at 23 miles an hour (3,500 h.p.). Two of these trucks combined into one engine could give a draw bar pull of 113,600 lbs. at speed of 23 miles an hour (7,000 h.p.). The various independent locomotive units can be articulated to give practically unlimited power. The several articulated units can be handled by multiple control as a single unit.

The electric locomotive is a simpler machine than the steam locomotive. The motors are simpler than the steam engines they replace. The motor auxiliary apparatus consists of current collecting and current controlling devices. These accessories are insignificant in comparison with the generating plant of the steam locomotive. The manipulation of these electrical accessories is concentrated in a master controller.

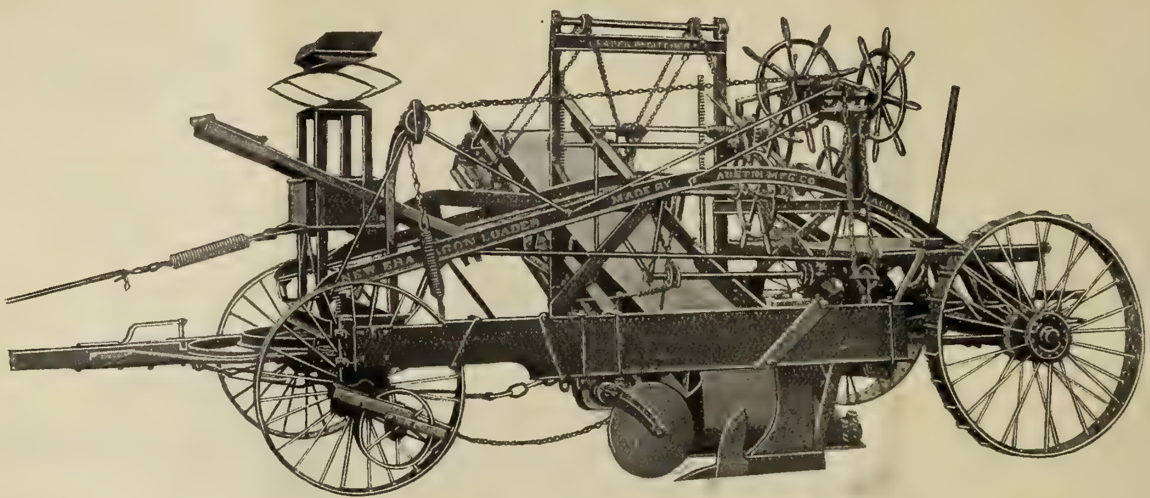
The electric locomotive is more economical than the steam locomotive. Assuming that the steam locomotive consumes 4 lbs. of coal per h.p. hour, and that the modern central station can deliver a h.p. hour to the dynamo for 2 lbs. of coal, and assuming further that the addition of an electrical system to the central station only adds 5% to the total losses, it follows that the electric locomotive can deliver a h.p. hour to the draw bar with approximately half the coal consumption of the steam locomotive doing the same work. Moreover the electric locomotive consumes no power when idle, nor when coasting. Not only is the electric locomotive more economical of power than the steam locomotive but its maintenance is less. Taking the locomotive mileage for 1907 as 1,300,000,000 miles, and cost of repairs and renewals as $104,000,000.00, the locomotive maintenance was 8c. per locomotive mile. The figure for 1904 was 8.1c. According to such authorities as Messrs. Stillwell and Armstrong, the maintenance of the electric locomotive need not exceed 5c. per locomotive mile. This is an instance of an important contract that contains the guarantee that the maintenance of the electric equipment of the locomotive shall not exceed 4c. per locomotive mile.

Admitting that the electric locomotive is more powerful, simpler, and more economical than the steam locomotive, it is true that it is helpless in case of failure of power supply. A complete failure of the power system could tie up the electric zone. However, the possibility of such a contingency is remote. The reliability of the power station and the reliability of the transmission system is based on 20 years' experience. Each power station has reserve units, and the various power stations are inter-connected. The transmission lines are in duplicate. Repairs can be rapidly effected. Traffic can be shunted around local trouble as in steam service. The reserve units in the power stations, the interconnection of stations, and the duplication of the transmission systems practically eliminate the hazard of a complete stoppage of traffic due to failure of power. A destruction of the track due to such causes as wrecks and floods would carry away the third rail, and the third rail would interfere with repairs. However, the overhead trolley would practically render the power supply system independent of the permanent way.

In the discussion of the subject of electrification it is frequently assumed that a steam locomotive costs $10 per h.p., and the electrical equipment $100 per h.p. ($15 for the electric locomotive and $85 for the power station and the transmission system.) But coal chutes, water tanks, cinder pits, boiler shops, and a part of the machine shops should be charged up to the steam locomotive. They are as much a part of the steam locomotive equipment as the power house and transmission system are a part of the electric locomotive equipment. These steam accessories would have to be scrapped in a completely electrified division. It is not any more necessary for the railway company to own the power plant than it is for it to own a coal mine. There will be power companies as there are coal companies. It will be possible to buy power delivered to the trolley just as it is possible to buy coal delivered to the sidings. As to the cost of a h.p. hour at the draw bar of an electric locomotive compared with the cost of a h.p. hour at the draw bar of a steam locomotive, for equal work done the cost of current is greater than the cost of locomotive coal. However, according to Mr. Armstrong, the operating expense for 1,000 ton miles up and down a 2% grade is $1.39 for the steam locomotive and $1.02 for the electric locomotive. The cost in the case of the steam locomotive is made up of coal, crew, maintenance. In the case of the electric locomotive it is made up of current, crew, maintenance.

Assuming the cost of operation of the electric locomotive to be less than the cost of operation of steam locomotive, a given h.p. of electric locomotive will do more work in a year than an equal h.p. of steam locomotive. The electric locomotive is in service more hours per day than the steam locomotive. It is in service more days per year than the steam locomotive. There is no turning, coaling, watering, cleaning of fires, boiler washing. In the aggregate the steam locomotive makes 80 miles a day. The freight locomotive will average 6 hours a day on the road. Selected figures show better results. According to the American Master Mechanics' Report, 1905, on 2,620 locomotives distributed among 22 roads, the engines averaged 20% of their time in the roundhouse, 33% of their time awaiting orders to go on the road and 47% of their time actually on the road. The more common assumption is that the time in the roundhouse exceeds 30%. This is instanced in the following quotation from the Railway Age: "If we consider the average run of a steam locomotive consumes 10 hours, and that a 5-hour lay over is customary at the roundhouse, we see that one-third of the time is not available for earning dividends, and the motive power of the railroad is practically reduced by 33%—exclusive of engines that are in the shop." The increased availability of the electric locomotive, coupled with its high speed and heavy tractive effort characteristics, mean that the electric locomotive can handle more ton miles per year than an equal horse power of steam locomotive can handle. Messrs. Stillwell and Putnam believe that the ratio of electric locomotives to steam locomotives for a given service will not exceed 2 to 3, and will probably approximate 1 to 2.

Taking the normal steam service on a 2% grade to be 500 ton trains at 10 miles an hour, it is a simple matter to replace the steam locomotives with electric locomotives that can haul a 1,000 ton train up a 2%



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grade at 20 miles an hour. This does not necessarily mean that the electric locomotive unit will be four times as powerful as the steam unit. It can be. It is more probable, however, that the electric unit will be a 1,500 h.p. or 2,000 h.p. engine, and that these units will be articulated to give the required power. The articulated units will be controlled as one unit from one master controller.

Speaking of London, Eng., terminal conditions, Mr. Dawson says: "The use of electricity, taking into consideration the small proportion of long distance trains to local ones, will practically result in doubling, not only the average speed of local trains, but also in doubling the carrying capacity of existing lines and terminals." Mr. Sprague, speaking of American city terminal conditions, says: "As a net result it may be safely stated that so far as the train movements are concerned, the capacity of the yards, over and above that required for the storage of cars alone, can be trebled as compared with steam locomotive-drawn trains. In addition (smoke being eliminated) the yards can be roofed over and the space (overhead) utilized for streets, parks, and buildings."

Admitting that electrification is a cheaper alternative than laying new tracks on grades, building new tunnels, and enlarging terminals, it is not the only alternative so far as main line work is concerned. The addition of a block signal system on the miles of line not yet so equipped will increase the capacity of the railway system, and will do it much cheaper of course than electrification can do it. W. N. Smith points out that while double tracking increases the capacity fourfold, there is plenty of room for increasing the capacity of existing roads by equipping single track roads with block signals, since but 17% of the single track roads in the U.S. are protected with block signals, and single track roads constitute 70% of the total mileage. He admits, of course, that electrification will increase the capacity of roads already equipped with block signals.

Notwithstanding the fact that electrification increases capacity, reduces operating expenses, and improves service, in general the existing electrifications have been forced on the railways. In some cases, tunnels for instance, it has been brought about by legislation. In other instances, such as subways and terminals, the smoke nuisance has forced the issue. So far as suburban lines are concerned, street car competition has been the agent. The West Jersey & Sea Shore Rd. is, perhaps, the most conspicuous instance of voluntary electrification.

Even granting that one electric locomotive can do the work of two steam locomotives, and that the maintenance of the electric locomotive is half that of the steam, it does not follow that a general electrification of the American railway system would result in an electric locomotive doing as much for a dollar as the steam locomotive does for two. The functions of a locomotive in an industrial community, like that of America, is to pay dividends, but it cannot pay dividends until it has paid the operating expenses and the fixed charges of the railway system. If there is anything left of the revenues after paying the operating expenses (maintenance of way and structures, maintenance of equipment, conducting transportations, and general expense), and paying the fixed charges (interest on funded debt, interest on floating debt, rentals, taxes, and sinking fund), why, the remainder (the net earnings) is applicable to dividends. Now, according to the estimate of Messrs. Stillwell and Putnam, if all the U.S. railways were operated by electric power instead of steam, the aggregate cost of operation which in 1905 was $1,400,000,000.00, would have been $1,150,000,000.00. That is to say, the cost of electric operation would have been 82% of the cost of steam operation. This saving of $250,000,000.00 (18% of cost of steam operation) would not only have paid the fixed charges on the electric investment, but would have increased the net earnings. The conclusion then is that the ratio of the operating expenses and fixed charges of an electric system to the operating expenses and fixed charges of an equivalent steam service is nearer 1 to 1 than 1 to 2. The discussion is academic. Such a thing as the possibility of a general electrification is not even intimated. The general conclusion, however, is irresistible—electrification is the means of increasing the capacity of a congested railroad division.

ELECTRIFICATION—WHERE IT IS BEING DONE.

Admitting for the sake of argument that electrification will increase capacity, improve service, and reduce operating expenses, concrete instances of electrification justify these conclusions. Take the case of the Mersey Ry., a short main line road connecting Liverpool with Birkenhead, Eng. It is a tunnel road. It was electrified to eliminate smoke and meet ferry competition. The traffic is almost exclusively passenger. The system is direct current third rail 650 volt with multiple unit trains. The electric service was substituted for the steam service May, 1903. Mr. Dawson points out that a comparison of the electric service with the steam shows that the train mileage in 1901 (steam) was 311,000 miles, while in 1906 (electric) the train mileage was 829,000 miles. The locomotive charges per train mile in 1901 (steam) were 13.65 pence (approximately 27.7c.), while in 1906 the locomotive charges per train mile were 5.95 pence (approximately 11.9c.). The locomotive charges include power, locomotive wages, locomotive maintenance and repairs, and office expense. This increase in train mileage was effected by the increased schedule speed and the increased train frequency. This livening of the service enabled the weight of the train to be cut down to about one-half that of the steam trains. As a net result, this augmentation in service has been effected with an increase of 10% in the total operating expense. The smoke, of course, has been eliminated and the traffic is increasing.

The Mersey is not the only instance in England of the application of direct current third rail system to a steam road. The Great Eastern Ry. has electrified the line between Newcastle and Tynemouth. The Lancashire and Yorkshire has electrified the line between Liverpool and Southport. The District Ry. in London has been completely electrified. The Metropolitan (underground) has electrified all of its London lines. The direct current third rail system is used in each instance. In the case of the Great Eastern the change was made to meet tramway competition. The cost per locomotive mile has fallen from 14.5 pence (steam) to 6.75 pence (electric). The L. & Y. electrification was necessitated by tramway competition. The accelerated service resulting from electrification has had the desired effect. The District and the Metropolitan were electrified to augment their revenues by increasing the capacity of the system and improving the service. The increase in capacity and the improvement in the service have been realized, but the physical conditions are so extraordinary that a marked increase in the net earnings is not as yet being realized. However, confidence in the ultimate result is manifested by the work of consolidation, and extensions of electrifications that these lines are carrying out.

The third rail direct current system is in use on the continent of Europe, but is mainly confined to subway lines such as the Metropolitan of Paris, and the elevated roads like the Berlin Overhead. The third rail line between Milan Galarate and Porto Ceresio, in Italy, is the most important installation of this kind in Europe.

The third rail direct current system is extensively used in America. It is in use on the elevated roads such as those in Boston, New York, Philadelphia, and Chicago. It is in use on more than 40,000 miles of light railways (interurban service). It is doing heavy railway work on the Lackawanna & Wyoming Valley Rd., connecting Scranton and Wilkes Barre, Penn.; on 97½ miles of the Long Island Rd.; on the West Shore Rd. between Utica and Syracuse, N.Y.; on the West Jersey and Sea Shore Rd., connecting Camden and Atlantic City,—65 miles, double track; and on the New York Central (electric zone). There are other instances, but these are representative.

The most conspicuous example of the application of the third rail system to heavy railway work is the New York Central electrification. Its electrical equipment consists of 35 electric locomotives, 131 motor cars and 55 trailers. The service was inaugurated Dec., 1906. The locomotives are equipped with 600 volt motors. The nominal capacity of the locomotive is 2,200 h.p., the maximum capacity, 3,000 h.p. Vice-President Wilgus, who had charge of the electrification, said recently that the maintenance of the electric locomotives is so much less than that of the steam locomotives, and that the amount of the time spent in the shops by the electric locomotives is so much less than that spent in the shops by the steam locomotives, that the saving neutralizes the interest charge and the depreciation charge of the additional investment; and, moreover, shows a net saving in repairs and fixed charges over steam equipment of 19%. Mr. Wilgus stated further that a comparison of the light repairs and inspection of the electric locomotive with the coaling, watering, drawing fires, repairs, etc., of the steam locomotives shows a saving in time in favor of the electric locomotive of over four hours a day—a saving equal to 18%. He says the electric locomotive is a more nimble and a more efficient machine than the steam locomotive—that it has increased the daily ton mileage 25%. He added that the increased current consumption per ton mile for high speed service is 18%, while a corresponding increase in speed with steam service would run up the coal consumption 165% a ton mile.

The third rail direct current system is not as applicable to long distance heavy railway work as it is to the short haul. The low voltage of the direct current motor seriously handicaps the application of this system to heavy long haul work. The normal pressure of the direct current railway motor is 600 volts. This means heavy currents for heavy power. Heavy currents mean a third rail since the overhead trolley cannot handle heavy current. The third rail, of course, is not a desirable adjunct to the permanent way. Now heavy current cannot be transmitted economically more than a few thousand feet. This means that there must be substations at frequent intervals along the line. These substations draw high voltage alternating current from the transmission line and deliver low voltage direct current to the third rail. The change from alternating current to direct means moving machinery. Moving machinery requires attendants. Consequently the application of the low voltage direct current to long distance heavy railway work is handicapped by the physical objection to the third rail and the financial objection of the expense due to substation and feeder investment and the expense of substation crews. The advent of the 1,200 volt direct current railway motor will diminish the number of substations, but even with this voltage the current required for heavy freight service will be too heavy for the overhead trolley. The third rail cannot be insulated to stand this voltage. Conse-

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quently the 1,200 volt direct current can hardly be applied to extremely heavy railway work.

Admitting the commercial success of the direct current motor in street railway work, light railway work, heavy terminal work and admitting its limitations in main line work, the direct current series motor can be modified so as to work on alternating current and thereby eliminate the rotary converter substations and at the same time substitute a high voltage trolley for a low voltage third rail. Improvement in design has brought out a series railway motor that will work on single phase current.

The single phase railway motor is being applied to heavy railway work. It is in use on the New York, New Haven and Hartford Rd. between the Grand Central Station, New York, and Stamford, Conn., a distance of 34 miles. Twelve miles of this distance lie in the New York Central third rail zone. The remaining 22 miles are equipped with single phase trolley. There are no substations in the single phase system. Alternating current is fed into the trolley at 11,000 volts from the Cos Cob power station. There are 35 locomotives. They operate on direct current in the New York Central zone (12 miles), and on single phase alternating current the rest of the distance (22 miles). The locomotive weighs 85 tons (all on the drivers), and has a nominal capacity of 1,000 h.p. The locomotive can handle a 200 ton train at a schedule speed of 26 miles an hour with stops every 2.2 miles. It can attain a speed of 65 miles an hour with the same train, and can maintain a speed of 60 miles an hour on long runs with a 250 ton train. Heavier trains can be handled by coupling two or more locomotives and operating them as single units. The service was inaugurated July 24, 1907. Notwithstanding the handicap of a double set of auxiliary apparatus on the locomotive incident to the use of direct current on one part of the line, and alternating current on the other, the single phase motor is demonstrating that it can handle long distance heavy railway work.

The single phase motor is also in use on the Rochester division of the Erie Rd. The electrified section is 34 miles long. Overhead trolley is used. The current comes from Niagara Falls (approximately 90 miles). There is a single transformer substation. This substation reduces the transmission line pressure from 60,000 volts to a trolley pressure of 11,000 volts. The auto transformer on the car takes current from the trolley at 11,000 volts, and delivers it to the motors at 220 volts. The service was inaugurated in June, 1907. The single phase motor is in use on the Spokane and Inland Ry. The system involves 106 miles of track. There are 15 transformer substations. They reduce the line voltage from 45,000 volts to a single phase trolley pressure of 6,600 volts. However, within the city limits of Spokane, the motors run on direct current. The equipment includes six freight locomotives, each equipped with four 150 h.p. motors, six freight cars, each equipped with four 100 h.p. motors, and 15 passenger cars, each of which is equipped with four 100 h.p. motors.

The G.T.R. St. Clair tunnel installation is a conspicuous example of the application of the electric locomotive to heavy freight service. The tunnel involves two grades, each of which is 2%, and approximately a mile long. The locomotive (double header) weighs 125 tons (all on drivers). It has a nominal capacity of 1,500 h.p. and can haul a 1,000 ton train up a 2% grade at 10 miles an hour. It can give a draw bar pull of 80,000 lbs. before slipping its drivers. Each half unit can be used as an independent locomotive. Current is supplied from an overhead trolley at 3,300 volts. The change over from steam service to electric is now being made.

The single phase motor is also used for light railway work. It is in use on the Indianapolis and Cincinnati Traction Co. lines. The initial service was inaugurated Dec., 1904. This was the beginning of single phase railway work in America. It is in use on the Warren and Jamestown (Pennsylvania) street railway lines. Also in the Napa Valley, California. It is in use on the Pittsburg and Butler Ry., a 39 mile line connecting Pittsburg and Butler, Penn. The equipment involves 18 passenger cars, each equipped with four 100 h.p. motors. A single generating station supplies the power. The transmission pressure is 22,000 volts. Two transformer substations reduce the 22,000 volt line pressure to 3,300 volt trolley pressure. Within the city limits of Pittsburg the motors operate on 600 volt direct current. There are other roads. The magnitude of the application of the single phase railway motors is instanced by the fact that one American company alone has built 60 single phase locomotives and 2,000 single phase railway motors—representing the electrification of 1,000 miles of track.

The single phase railway motor is also being applied to heavy railway work in England. The London, Brighton, and South Coast Ry. is making an initial installation of it on its London suburban lines. The Midland Railway is equipping an experimental line with it.

The single phase system is also being applied to heavy railway work on the continent. The action of the Swedish Government is significant. There are 375,000 h.p. available in waterfalls in Sweden. Fuel is dear. The Government consequently is anxious to apply this power to the railways. It equipped an experimental line with single phase locomotives. As a result of the tests the Government has decided to proceed with railway electrification. The initial equipment will involve 1,300 miles of track and 385 single phase locomotives. The Swiss Government has equipped an experimental single phase line near Zurich. As a result of the tests the single phase system will probably be applied to the St. Gothard Tunnel Line. In Germany the Prussian Government will use the single phase system on the Eifel Bahn, a double track line, connecting Cologne and Treves, a distance of 112 miles. The substitution of the single phase system is also contemplated on the Berlin Ring Railway. The Vienna-Baden interurban line in Austria is one of the largest single phase lines in Europe. It is 17.8 miles long. The equipment involves 14 motor cars, each of which is equipped with four single phase motors of 40 h.p. each. The Brembana Valley Ry. is the most important single phase line in Italy. It is 16 miles long and involves 5 locomotives of 300 h.p. each. The Roma-Civita-Costellena line (Roman suburban) is another single phase road. The use of the single phase motor is also contemplated for heavy railway work in Italy.

Admitting that the direct current railway motor is a commercial success for short hauls, and admitting that the single phase railway motor extends the range of electrification to main line work, it is also true that the three phase railway motor is adapted to long distance heavy railway work. The conspicuous example of the application of the three phase locomotive to railway work is the Valtellina line in Italy. The electrified portion is 66 miles long. The transmission pressure is 40,000 volts, the trolley pressure is 3,000 volts. Two overhead trolleys and the track constitute the three circuits. The two trolley wires, of course, are not only insulated from the rail, but from each other. The original equipment consisted of five 70 ton locomotives and 10 motor cars. Two of the locomotives have been transferred to the Simplon Tunnel, and replaced by locomotives of later design. The later locomotives are equipped with two motors, one of which is 1,200 h.p., and the other 1,500 h.p. The locomotive has three speeds of 40, 26, and 16 miles an hour. The system has been in operation five years. Its success has been pronounced. The Government is arranging to equip an additional 60 miles of the road with three phase locomotives.

The Simplon tunnel service is performed with three phase locomotives. The electrified section is 12.5 miles long. As is customary with the three phase systems, two trolley wires and the track constitute the three circuits. Fifteen cycle 3,300 volt current is used. The locomotives weigh 62 tons, 42 tons of which are on the drivers. Their rating is 780 h.p. They have two speeds, 42 and 21 miles an hour. The draw bar pull at the lower speed is 12,000 pounds, and at the higher speed 7,000 lbs. They handle 400 ton passenger trains and 500 ton freight trains. The service involves 1% grade. The electrification is to be extended 12 miles, and later will probably be carried to Milan

Further extensions of the three phase systems are to be used in Italy. The Italian Government has entered on a programme that involves the electrification of 12 trunk line divisions, representing approximately 200 miles of line. More than half of this will be three phase. The most of the divisions in question are mountain passages that involve heavy grades and frequent tunnels. The three phase system is also to be applied to the Alberg Line in Switzerland—the connecting link in the trunk line between Paris and Vienna. The three phase system has not been tried on English railways.

In America three phase locomotives are to be used in the Great Northern Ry.'s Cascade tunnel in Washington. Here the object is to eliminate smoke. The energy will come from a water power plant 30 miles from the tunnel. The transmission pressure will be 33,000 volts. A transformer station at the tunnel portal will step this pressure down to 6,600 volt trolley pressure. The locomotives will weigh 100 tons—all on the drivers—and have a nominal capacity of 1,300 h.p.—will haul a 500 ton train up a 2% grade at 15 miles an hour. Electric braking will be used. This feature will be made recuperative—consequently there will be not only a saving of brake shoes on down grade, but a delivery of current from the locomotive to the line in such a way as to help out the power stations in hauling other trains up grade.

This paper, the balance of which will be given in our next issue, was read before the Canadian Railway Club recently.

* * *

Headlights on Locomotives.

The Secretary of the Board of Railway Commissioners has issued the following circular to railway companies: "Owing to the numerous reports the Board has received from its inspectors relating to the poor condition of the headlights on a large number of locomotive engines in use on the different railway systems in Canada, the Board has had under consideration the advisability of requiring the railway companies subject to its jurisdiction to use an electric system of headlights, or some other good system that will give satisfactory light for the protection of life and property.

"The Board directs me to say that it will be glad to have you file with it, in writing, at as early a date as possible, such observations as you may wish to make regarding the proposal of the Board to issue an order as suggested herein."

* * *

The C.P.R. has offered to make the Alberta Government a grant of 320 acres of land for the proposed establishment of an agricultural college, provided it be located in the vicinity of Gleichen.

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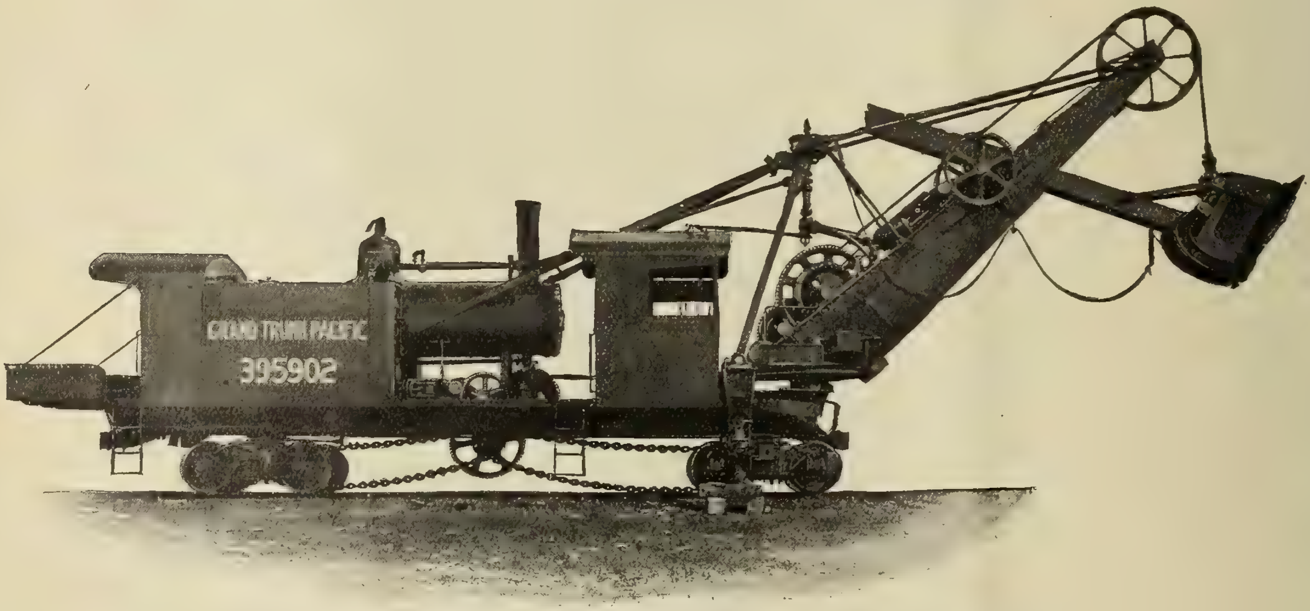

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STEAM RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1907.

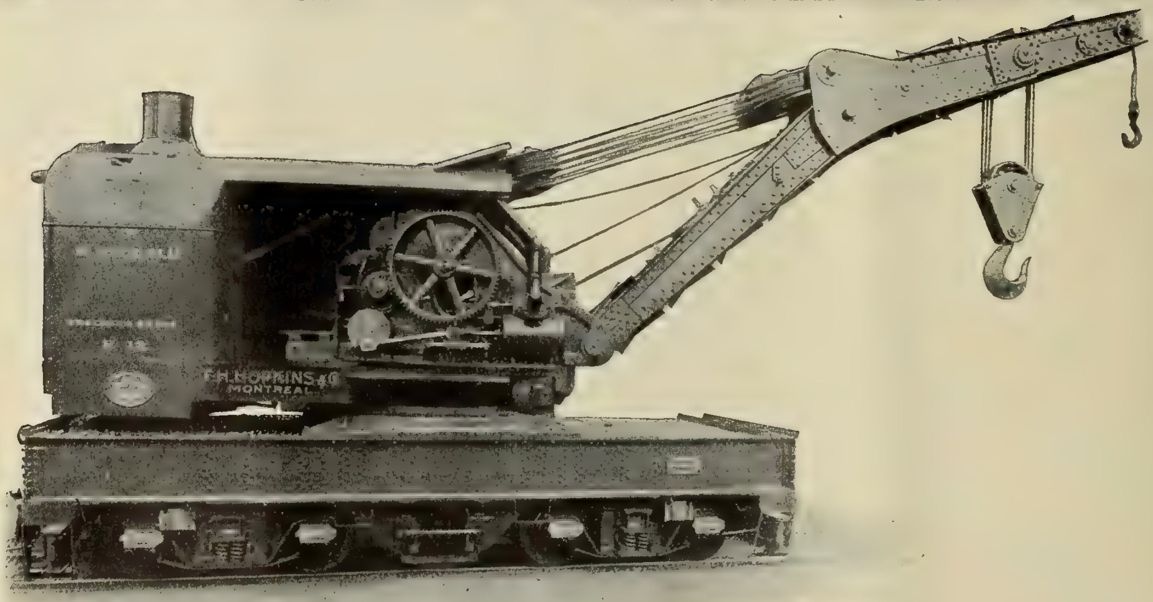
The accompanying table gives some statistical information respecting the operation of the various railways in Canada, in addition to that given in the table published in our Feb. issue, pgs. 105 and 107. The two first columns of figures in the present table show the passenger and freight earnings, which form the principal sources of revenue. The total earnings from operation, which is the second column of figures in the table in our Feb. issue, includes also "other earnings," such as telegraph rents, and various other small receipts, together with balances of car mileage, switching charges, and hire of equipment, which amounted to $5,146,945 and $122,537, respectively. The next four columns show the distribution of the operating expenses. The gross of these four columns deducted from the total earnings from operation gives the net earnings, as given in the third column of the table in our Feb. issue. The other columns give some of the more important statistics.

Name of Railway.	Passenger Earnings.	Freight Earnings.	Maintenance of Ways and Structures.	Maintenance of Equipment.	Conducting Transportation.	General Expenses.	Passenger Earnings Per Train Mile.	Freight Earnings Per Train Mile.	Passengers Carried One Mile.	Tons of Freight Carried One Mile.
	$	$	$	$	$	$	$	$		
Alberta Ry. and Irrig. Co.	56,245	114,994	48,317	11,056	57,629	19,240	1.17	1.82	1,299,909	4,857,009
Algoma Cent. & Hudson Bay	17,348	243,323	36,170	34,987	131,121	14,688	0.57	6.67	560,082	5,879,786
Atlantic and Lake Superior	25,280	43,605	20,519	13,936	29,186	6,478	0.39	0.59	918,525	2,325,707
Bessemer and Barry's Bay	....	945	3,337	....	1,632	579	....	....	....	....
Bay of Quinte	49,941	235,695	37,568	25,379	97,232	10,697	0.21	1.02	1,750,494	11,993,386
Bedlington and Nelson	332	1,658	6,675	657	6,680	290	0.14	0.71	5,779	55,405
Beersville Coal and Ry Co.	147	2,269	7	225	4,085	77	....	....	....	....
British Yukon	81,948	235,609	58,858	17,840	59,224	11,642	1.51	4.09	1,042,832	2,838,431
Brockville, Westport & N.W.	34,868	27,154	3,087	1,646	17,318	5,014	1.15	0.95	2,204,040	655,950
Buctouche and Moncton	8,592	16,067	7,937	1,531	7,140	3,211	0.40	0.79	....	....
Brandon, Sask. & Hudson Bay	2,037	3,996	14,035	2,542	9,769	709	1.55	0.80	77,297	463,851
Canada Coals and Ry. Co	4,685	33,735	5,096	3,650	11,244	2,282	0.33	1.60	110,891	932,809
Canada Southern	2,141,260	6,111,298	1,736,949	1,751,149	4,954,969	213,827	....	....	82,338,033	....
Canadian Government Rys.—										
Intercolonial	2,934,231	5,685,268	1,500,399	1,671,435	4,677,534	352,693	0.92	1.34	148,412,096	966,919,251
Prince Edward Island	149,603	138,733	106,837	62,912	198,921	8,305	0.44	0.41	7,033,260	3,336,959
Canadian Northern	1,720,424	5,741,729	1,228,957	852,799	3,097,495	196,449	1.18	2.51	60,683,505	657,437,305
Canadian Northern Ontario	59,854	66,544	33,805	14,886	81,091	12,052	0.56	2.13	2,403,339	4,009,207
Canadian Northern Quebec	178,067	470,138	106,982	67,728	384,549	26,007	0.84	2.16	8,128,920	32,611,672
Canadian Pacific	22,688,334	45,477,512	9,885,597	8,930,329	25,064,822	1,430,169	1.67	2.39	1,044,888,381	5,812,386,819
Cape Breton	5,409	2,696	3,769	1,075	7,674	3,380	0.27	0.13	177,604	72,871
Caraquet	13,647	36,667	15,146	9,560	20,962	5,523	0.25	0.82	498,330	1,129,455
Carillon and Grenville	1,778	155	1,978	1,104	2,124	40	0.62	0.54	....	....
Central Ontario	66,957	182,369	45,728	11,385	77,098	10,172	1.25	1.49	3,139,088	6,940,520
Crow's Nest Southern	29,360	104,118	39,864	18,627	50,727	3,821	0.90	3.57	697,236	8,905,176
Cumberland Ry. and Coal Co.	18,157	77,810	22,321	12,927	8,794	....	....	....	....	....
Dominion Atlantic	380,157	398,413	104,175	55,530	296,345	41,933	0.78	1.46	15,066,225	15,587,371
Elgin and Havelock	3,767	8,863	4,181	895	5,384	252	....	....	109,035	153,016
Esquimalt and Nanaimo	205,403	244,391	68,287	30,100	205,977	876	2.25	5.04	4,231,558	5,781,477
Grand Trunk	10,596,343	20,220,610	3,407,146	6,233,872	11,258,239	865,856	1.28	2.11	490,124,675	3,008,720,055
Canada Atlantic (G.T.R.)	471,685	1,440,822	447,858	384,865	989,799	52,240	0.63	1.50	21,857,332	209,010,079
Halifax and South-Western	162,357	156,711	90,515	32,876	140,658	26,979	1.37	1.25	6,628,081	7,863,317
Hampton and St. Martins	4,178	7,921	1,500	103	3,705	448	0.31	0.60	110,302	282,247
Hereford	18,071	54,391	28,988	13,215	52,564	2,559	0.32	1.17	697,612	4,203,002
Inverness Ry. and Coal Co	20,131	164,437	32,451	20,848	50,262	6,487	0.50	1.80	816,374	15,318,966
Irondale, Bancroft and Ottawa	7,781	23,903	11,314	2,683	12,808	4,382	0.25	0.78	221,280	1,151,586
Kaslo and Slocan	6,301	8,942	20,541	3,067	12,578	1,210	0.29	0.42	81,626	124,355
Kent Northern	7,741	9,753	3,416	950	4,935	1,530	....	....	....	....
Kettle River Valley (not reptd)	....	....	....	....	....	....	....	....	....	....
Kingston and Pembroke	56,659	167,501	52,430	21,116	90,109	7,759	0.35	1.67	1,262,553	6,344,805
Klondike Mines	9,268	26,771	34,392	9,401	41,655	11,514	0.68	1.96	59,369	70,452
Lake Erie and Detroit River	242,769	1,275,861	142,828	201,136	694,127	35,329	0.67	2.57	11,295,308	211,157,627
Liverpool and Milton	1,212	6,293	1,283	855	3,074	523	....	....	24,200	66,150
Lotbiniere and Megantic	4,035	29,227	6,292	3,261	10,924	5,704	0.21	1.59	159,974	803,445
Manitoulin and North Shore	1,482	58,068	8,611	4,999	18,524	6,017	0.17	3.90	35,646	3,195,291
Massawippi Valley	72,783	118,501	43,755	13,765	108,621	2,650	0.75	0.98	2,998,271	13,803,631
Montreal and Atlantic	214,355	553,271	169,529	81,678	371,187	21,828	0.72	1.41	7,679,029	47,771,985
Montreal and Province Line	49,448	42,986	23,244	3,806	45,480	2,009	0.70	0.80	2,041,858	1,942,841
Montreal and Vermont Junc.	69,012	136,131	17,895	1,929	76,032	3,436	1.02	2.42	2,945,500	18,752,823
Morrissey, Fernie and Michel	7,104	74,290	8,886	11,790	41,229	8,307	0.48	3.01	1,092,521	5,824,763
Midland Ry. of Manitoba	1,631	8,367	10,404	4,283	15,306	1,476	0.24	1.19	77,401	617,180
Nelson and Fort Sheppard	38,291	43,050	39,354	14,451	63,481	10,632	0.83	2.49	1,033,810	1,001,922
New Brunswick Coal & Ry. Co.	9,172	22,634	12,436	4,022	17,686	6,514	0.17	0.44	300,606	2,018,656
New Brunswick and P.E.I.	10,566	20,193	8,343	3,902	10,055	1,444	0.41	0.43	372,012	438,885
New Brunswick Southern	15,920	24,824	12,945	5,757	23,099	6,138	0.26	0.41	500,985	852,939
New Westminster Southern	85,995	23,020	28,445	7,650	49,078	4,753	1.38	0.92	2,304,162	1,205,020
Nosbonsing and Nipissing	....	34,279	10,969	5,141	18,167	....	....	2.53	....	148,478
Nova Scotia Steel and Coal Co.	2,047	3,576	5,333	2,742	1,669	4,138	....	....	....	....
Orford Mountain	6,580	18,512	11,993	1,544	13,890	2,641	0.15	1.42	205,472	438,720
Ottawa and New York	69,152	55,348	38,345	13,845	64,821	6,120	0.88	1.44	2,846,678	3,762,260
Phillipsburg Ry. & Quarry Co.	....	1,380	1,224	....	1,385	3,100	....	....	....	....
Princeton Br. Wash. Co.	9,387	11,165	2,445	810	1,964	275	0.94	1.74	459,673	442,354
Quebec Central	301,976	611,438	154,298	97,625	310,471	56,487	0.73	1.60	12,572,334	42,176,068
Quebec and Lake St. John	206,761	365,045	86,215	59,469	211,935	38,095	0.90	2.23	8,140,965	38,999,405
Quebec Ry., L. and Power Co.	145,908	39,585	20,687	14,005	68,487	27,117	0.55	1.58	6,482,389	1,331,680

(*Continued on page* 239)

HART AND OTIS TYPE DUMP CARS

THE **HART-OTIS CAR CO.**, LIMITED, **MONTREAL**
Successors to Dominion **DUMP CAR** Company, Limited



"Industrial" Wrecking Cranes
Particulars upon request
From 25 to 100 Tons Capacity
Prompt Shipments
F·H·Hopkins & Co
CANADIAN REPRESENTATIVES
Successors late Jas. Cooper
Montreal

Steam Railway Statistics for Year Ended June 30, 1907.—*(Continued from page 237)*

Name of Railway.	Passenger Earnings.	Freight Earnings.	Maintenance of Ways and Structures.	Maintenance of Equipment.	Conducting Transportation.	General Expenses.	Passenger Earnings Per Train Mile.	Freight Earnings Per Train Mile.	Passengers Carried One Mile.	Tons of Freight Carried One Mile.
	$	$	$	$	$	$	$	$		
Quebec, Montreal and South'n.	103,824	144,506	54,310	34,096	140,249	23,481	0.55	0.67	3,951,123	10,147,807
Red Mountain	5,685	22,054	8,995	2,412	18,840	4,954	0.95	1.83	139,122	846,882
Rutland and Noyan	6,988	8,722	1,285	1,675	5,247	678	1.50	3.08	310,276	810,725
Salisbury and Harvey	10,976	25,492	18,110	4,016	13,821	1,806	....	....	....	....
Schomberg and Aurora	4,112	4,616	2,271	1,252	7,481	252	0.22	1.20	182,220	40,320
Stanstead, Shef'd & Chambly.	28,827	53,480	17,581	3,074	40,767	1,384	0.45	1.22	1,219,301	2,999,538
St. Clair Tunnel	59,784	252,003	12,414	99,581	32,177	2,194	....	....	....	....
St. Lawrence and Adirondack.	142,432	180,397	59,326	26,694	106,978	2,640	1.00	2.43	8,934,062	16,911,290
Sydney and Louisburg	20,262	382,413	67,115	128,465	157,905	45,812	0.61	4.36	734,647	57,105,680
Temiscouata	59,331	110,707	40,960	25,641	51,979	17,063	0.41	1.35	....	....
Temiskaming and N. Ontario	349,886	297,857	93,092	63,881	315,533	30,654	2.19	1.78	12,643,073	19,619,604
Thousand Islands	12,267	26,104	4,212	2,360	15,822	2,675	0.34	0.73	219,366	231,978
Toronto, Hamilton & Buffalo	247,404	566,544	103,531	70,421	327,411	36,841	1.02	3.65	11,094,865	41,677,780
Vancouver, Victoria & Eastern	36,292	227,934	48,661	20,018	101,046	9,155	1.29	5.44	907,792	14,017,098
Vancouver, West. and Yukon.	33,245	52,980	13,684	838	45,218	3,396	0.98	4.04	1,177,551	660,793
Victoria Ter. Ry. and Ferry Co.	3,330	6,898	4,248	1,076	5,722	1,757	0.42	0.99	800,400	109,338
Victoria and Sidney	16,977	13,772	6,032	2,054	11,786	3,274	0.68	1.16	113,630	261,711
Wabash Rd. in Canada	782,302	1,755,709	175,778	269,129	1,420,197	65,482	1.06	1.95	35,858,517	322,596,769
Wellington Colliery Co	2,381	2,778	8,441	15,085	10,873	....	0.53	0.62	46,042	30,111
Wel. Col. Co. Ladysmith Ex.	494	36,839	3,037	7,115	27,181	....	0.26	1.97	13,369	4,529,986
York and Carleton	876	1,707	1,080	125	2,542	33	....	....	....	....
Totals	45,730,652	95,738,079	20,887,091	21,666,373	57,325,543	3,869,669			2,049,549,813	11,687,711,830

The Railway Commissioners' Report.

The second report of the Board of Railway Commissioners for the year ended Mar. 31, 1907, has been laid before the Dominion Parliament and issued to the public. It gives details of changes in the law effected during the session of Parliament of 1906, lists of orders made, and judgments given, together with details of the work done by the different officers during the year. To the general public, however, the report has no interest, and to the transportation officials, whose interests are affected, its usefulness is limited by reason of the fact that the information is a year old. The Railway and Marine World publishes every month a list of the orders issued up to as near the date of publication as possible, and from time to time gives in full the more important orders and judgments. The value of reports of all kinds is the promptness with which they are issued, and in the present case there can be no reason why a report should be a year late in being issued except to carry out to the letter the red tape idea that no report can become public property until it has been laid on the table of the House of Commons at the first session after the closing of the year.

On Mar. 31, 1907, the staff of the Board consisted of 32 persons, the salary list amounting to $44,980, against 25 persons and a salary list of $35,200, at Mar. 31, 1906. The names of the principal members of the staff with their office and salary are as follows:

ENGINEERING.

G. A. Mountain	Chief Engineer	$4,800
T. L. Simmons	First Assistant Engineer.	2,500
H. A. K. Drury	Second " "	2,500
J. A. Tessier	Third " "	2,000
J. Murphy	Electrical Expert	1,500

TRAFFIC.

J. Hardwell	Traffic Expert	$3,600
G. A. Brown	Chief Clerk Traffic Dept.	2,000

LAW AND EXECUTIVE.

A. G. Blair	Law Clerk	$2,500
E. C. Lalond	Inspector of Accidents	2,200
Jas. Ogilvie	Inspector of Ry. Equipments	2,200
E. A. Primeau	Registrar and Account't.	2,100
R. Richardson	Priv. Sec. to Chief Comm.	$ 1,500
A. E. Ecclestone	Priv. Sec. to Secretary	1,000

RECORDS DEPARTMENT.

J. W. Thomson	Chief Clerk	$1,100

April Birthdays.

Many happy returns of the day to—

J. A. Armstrong, Chief Train Dispatcher C.P.R., Ottawa, born at South Durham, Que., April 6, 1863.

F. J. Balch, Assistant General Freight Agent Ottawa and New York Ry., Ottawa, born at Massena, N.Y., April 15, 1870.

F. E. Barbour, General Passenger Agent Rutland Rd., Rutland, Vt., born at Bangor, Me., April 3, 1870.

Adam Brown, formerly President Wellington, Grey and Bruce Ry. (now G.T.R.), Vice-President G.N.W. Telegraph Co., and Postmaster of Hamilton, born at Edinburgh, Scotland, April 3, 1826.

A. H. Clark, Master Mechanic Irondale, Bancroft and Ottawa Ry., Irondale, Ont., born April 5, 1867.

A. E. Edmonds, District Passenger Agent C.P.R., Detroit, Mich., born at Woodstock, Ont., April 8, 1866.

J. H. Flock, K.C., Honorary Counsel Canadian Ticket Agents' Association, London, Ont., born at Toronto, April 6, 1834.

B. W. Folger, Manager Niagara Navigation Co., Toronto, born at Kingston, Ont., April 8, 1872.

W. E. Fowler, Master Car Builder C.P.R., born at Weymouth, Dorsetshire, Eng., April 27, 1856.

G. H. Garden, C.E., Chief Engineer Alberta Ry. and Irrigation Co., Lethbridge, Alta., born at Woodstock, N.B., April 5, 1849.

F. A. Gascoigne, Car Accountant C.P.R., Montreal, born at Gosport, Hants, England, April, 1866.

J. P. Gay, Manager G.T. Despatch Fast Freight Line, Detroit, Mich., born at Hamilton, Ont., April 26, 1857.

B. C. Gesner, formerly Air Brake Inspector I.C.R., now travelling representative Galena Signal Oil Co., born at Cornwallis, N.S., April 23, 1859.

J. M. Horn, city freight agent Canadian Northern Ry., Winnipeg, born at Schoots, Lanarkshire, Scotland, April 12, 1880.

E. A. James, ex-Manager Canadian Northern Ry., Winnipeg, born in London, Eng., April, 1865.

B. S. Jenkins, General Superintendent C.P.R. Telegraphs, Winnipeg, born April 8, 1859.

J. Kyle, Assistant Master Mechanic Canadian Northern Ry., Edmonton, Alta., born at Toronto, April 11, 1877.

J. S. Lawrence, Superintendent C P.R., Medicine Hat, Alta., born at Toronto, April 9, 1863.

D. McNicoll, Vice-President C.P.R., Montreal, born at Arbroath, Scotland, April 7, 1852.

P. Mooney, General Freight and Passenger Agent, Halifax and Southwestern Ry., Halifax, N.S., born at St. Catherines, Que., April 19, 1871.

W. A. Ritchie, District Superintendent The Pullman Co., Montreal, born at Edinburgh, Scotland, April 13, 1854.

E. V. Skinner, Assistant Traffic Manager C.P.R., New York, born in London, Eng., April 22, 1849.

J. R. VanCleve, Master Mechanic, Alaska Central Rd., Seward, Alaska, born at Little Falls, Minn., April 6, 1859.

W. Wainwright, Fourth Vice-President G.T.R., Montreal, born at Manchester, Eng., April 30, 1840.

G. C. Wells, Assistant General Passenger Agent C.P.R. Eastern Lines, Montreal, born at Brockville, Ont., April 15, 1866.

Hon. J. Wood, President and General Manager New Brunswick and Prince Edward Island Ry., Sackville, N.B., born there April 18, 1843.

W. Woollatt, ex-General Superintendent Buffalo Division Pere Marquette Rd., Walkerville, Ont., born at Weedon, Hertfordshire, Eng., April 2, 1855.

J. B. Lambkin, Assistant General Passenger Agent Intercolonial Ry., Halifax, N.S., born at Quebec city, April 5, 1858.

BROWNHOIST LOCOMOTIVE CRANE

FUELING A LOCOMOTIVE TENDER

For which purpose they are in much demand.

They can of course be equipped with hook, and used for making lifts of any material.

Write for details and catalogues.

—THE—

BROWN HOISTING MACHINERY CO.

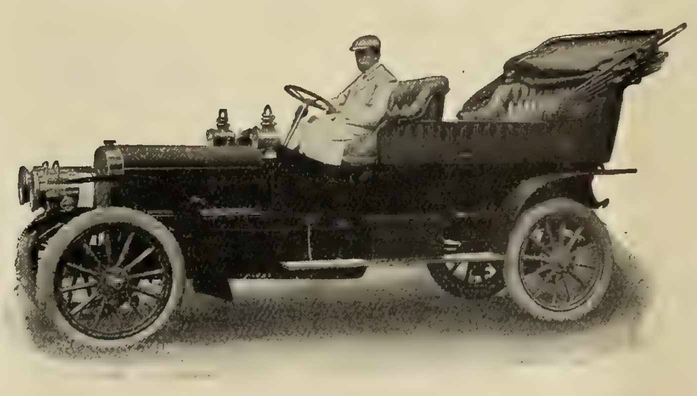
ENGINEERS AND DESIGNERS OF HOISTING MACHINERY OF ALL DESCRIPTIONS

MAIN OFFICE AND WORKS: CLEVELAND, OHIO. BRANCH OFFICES: NEW YORK & PITTSBURG

THORNYCROFT AUTOMOBILES

HIGH-CLASS CARS ONLY

From 14 to 75 H.P.



45 H.P. Six-Cylinder Car.

Prices Range from $3,500 to $10,000

MOTOR DELIVERY WAGONS, OMNIBUSES LORRIES

SOLE SALES AGENTS FOR CANADA

POLSON IRON WORKS LIMITED, TORONTO

A Scotsman's Climb.

From The Edinburgh People's Journal.

Take a rigid training in Auld Licht faith and practise long-houred service on economical Scotch railways, comprehensive experience in Eastern Canada, New York, and the spacious plains of the Last West; broaden and deepen the result by a decade of management of a fast-growing, pioneer, cross-continental system of transportation, and you produce the Third Vice-President of the Canadian Northern Railway—D. Blythe Hanna, the extra successful man, who desires you acutely to feel the altitude he has reached is common enough. The nearest approach to vainglory of which Mr. Hanna is known to have been guilty is the admission that all the conceit was taken out of him long ago. But a man accustomed to handling enormous affairs, who has carried the main burden of the day-to-day management of a railway that has grown from nothing to 4,000 miles in 10 years, and who is never slow to acknowledge his debt to the little kirk where the fear of the Lord was rather grimly enjoined upon him, is too big to be anything but humble, unaffected; without worry about the impression he makes upon less prominent men.

The softer side of the Auld Licht theology is not sidetracked in the spacious room in Toronto, where Mr. Hanna keeps his hand on costly business that reaches down to the Atlantic, and is ready to overflow the Rocky Mountains into the Pacific. To the Presbyterian Church on Sunday mornings, and to the piano on Sunday afternoons, to sing old Scotch ballads to his daughter's accompaniments—these are habits that he will be surprised to see named in print. But they are of the essence of a character that is happily Scotch, and domestic and simple, in spite of a success that would have turned many other heads.

Mr. Hanna was born at Thornliebank, a few miles from Glasgow, five days before Christmas, 1858. He left the village as a boy; and when he returned 20 years afterwards, all the people he had known were dead. At 16 he became a junior clerk and ticket agent on the Glasgow, Barrhead and Kilmarnock Railway. After four years he changed to the Caledonian as goods clerk; and four years later, in 1882, went to Canada as a clerk in the audit office of the Grand Trunk Ry., at Montreal. In 1884 he transferred to the audit office of the New York, West Shore, and Buffalo System. He stayed two years in New York, and then accepted the post of chief accountant of the Manitoba and North-Western Ry., a small line branching from the Canadian Pacific at Portage la Prairie, 56 miles west of Winnipeg.

Six years of this post led to the Treasurership of the Company in 1892, and in 1893 he became Land Commissioner as well. Then, in the last month of 1896, he found his real place, or rather the avenue to his proper vocation, the full extent of which is still only partially apparent. He became Superintendent of the Lake Manitoba Ry. and Canal Company, whose small, almost unnoticed line began in a village and ended nowhere. The Canadian Northern system, chartered to span the continent, is the present-day shape of the hundred-mile piece of track from Gladstone to Dauphin, of which Mr. Hanna took charge in Dec., 1896. The total operating force, including the Superintendent, was 13. To employ an extra man was not justifiable financially, so he compromised on a boy who is still on the pay-roll.

Ten thousand seven hundred men are employed on the system to-day. This is not a story of the expansion of the Lake Manitoba Ry. and Canal Company into a transcontinental railway, although Mr. Hanna has been associated with every move in the most rapid uprising of a system of intercommunication that has ever happened. Mr. Mackenzie, the President of the Canadian Northern Ry., has a rare instinct for the right enterprise, and right men to conduct it. That Mr. Hanna became his right hand surprised nobody who knew Mr. Hanna. When various apparently disconnected undertakings were merged into the Canadian Northern Ry. Co. in 1902, with headquarters in Toronto, Mr. Hanna became Third Vice-President, and moved from Winnipeg to the charming metropolis on Lake Ontario. The Canadian Northern interests built a railway in Ontario that directly connects Toronto with the West, via Parry Sound. Mr. Hanna became Third Vice-President of the Canadian Northern Ontario Ry. Co. They acquired two separate lines in Quebec, which are now the Canadian Northern Quebec Ry. and Mr. Hanna is the President of the amalgamated undertaking.

When a man shows such capacity in one series of enterprises his advice is sought in the expansion of others. Four years ago Mr. Hanna became a director of several other financial institutions, and is known to have declined bank directorships. And he is just the same genial, consistent goer who started 30 years ago on the Glasgow, Barrhead and Kilmarnock Ry., at six shillings a week.

◆

Fuel Consumption by Locomotives.

One of the new features of the information collected by the statistical branch of the Department of Railways, relates to the consumption of fuel, which is one of the chief items in the cost of operating a railway. The table prepared from the information gathered, gives the following results for the year ended June 30, 1907:

Class of Locomotive.	Coal.		Wood.		Total tons of Fuel.	Miles run.	Fuel cons'm'd per 100 miles.
	Anthracite.	Bituminous.	Hard.	Soft.			
	Tons.	Tons.	Cords.	Cords.			Tons.
Freight.....	9,797	3,173,101	367	21,348	*3,194,510	43,824,909	7.29
Passenger...	....	1 325,955	222	9,559	1,331,178	29,110,258	4.57
Mixed......	....	301,041	690	1,398	303,549	7,492,278	4.05
Switching...	....	555,438	68	3,929	557,576	14,816,272	3.76
Construct'n.	48	222,283	1	1,497	223,141	4,911,249	4.54
Total....	9,845	5,577,818	1,348	37,731	*5,608,954	100,154,966	

*Two cords of wood calculated as one ton of fuel.

The total amount of fuel consumed in all services was 5,608,954 tons. The average consumption of fuel per 100 locomotive miles was as follows: Freight, 7.29 tons; passenger, 4.57; mixed, 4.05; switching, 3.76; and construction, 4.54. Applying the average cost to the average consumption, it is found that $20.48 would be expended on a freight train for the distance indicated, and $12.94 on a passenger train. In the operating expenses for the year is a charge of $29,511,063.67 for fuel for locomotives. Divided by the tons given in the above table, this would mean a cost of $5.26 per ton. The actual cost of coal at points of distribution, as reported by the railways, was considerably below this figure, and there is a difference of over $12,000,000 between the fuel bill thus made up and the total included with operating expenses. The sum indicated would probably be the cost of handling. The average cost of coal at the point of distribution was $2.81. The total fuel bill of all the railways, apart from the cost of 223,141 tons used in connection with construction work, was $15,137,504.48. This was equal to 14.59% of the operating expenses; but must be read in the light of the figures which place the final cost of fuel at $29,511,063.67.

◆

A branch of the Canadian Society of Civil Engineers has been established in Quebec with 45 members. E. A. Hoare, Chief Engineer of the Quebec Bridge and Ry. Co., is acting as Chairman, and P. E. Parent, District Engineer of the Department of Marine and Fisheries, as Secretary.

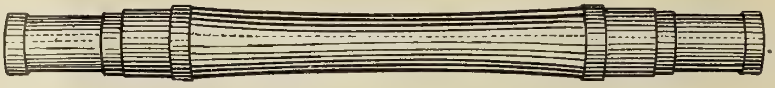
Rebating on U.S.-Canada Through Traffic.

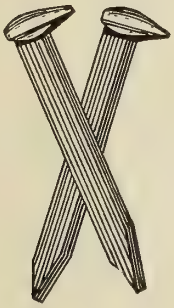
The U.S. Federal Court of Appeals has set aside the recent conviction of the Camden Iron Works, Philadelphia, Pa., for accepting a rebate of $1,230.57 from the Mutual Transit Co., of Buffalo, N.Y., on a shipment consigned to Winnipeg, Man. It is therefore decided that when a shipper in the U.S. makes a contract with a foreign carrier for continuous transportation over lines, on land or water, both within and without the United States, he can accept a rebate from the total amount of freight charges paid. The decision states: "The underlying problem presented, involves the ascertainment not merely of the meaning of the word 'arrangements,' but of the effect which in this particular case should be ascribed to the words 'common arrangement,' as used in the act of Feb. 4, 1887, and to the phrase 'tariffs published and filed by such carrier, in the act of Feb. 19, 1903. The court below held throughout and finally charged the jury 'that if these goods were shipped on a through bill of lading or any other through document or writing from any place in the U.S. to an adjacent country upon a contract of continuous shipment by a water company, partly over railways and partly over its own water route, and such goods were received in transit on this through writing under conventional division charges, such water company must be deemed to have subjected itself to an arrangement for a continuous carriage or shipment within the meaning of the act to regulate commerce.' This language is very clearly the same as was employed by the Supreme Court in the case cited above; but the nature of the case with which the tribunal was dealing was so essentially different from that of the case now under consideration as to render the decision in the former wholly inapplicable to the latter. In this instance the contract for continuous carriage or shipment was between the shippers themselves and a single carrier by water, and the question is not whether a carrier subject to the act had wilfully failed to file and publish the tariff or rates and charges, but whether the defendants, shippers had received from the rate that was named in the tariff or tariffs which such carrier had in fact published and filed. An offence which a carrier subject to the act may perpetrate by failing to file and publish tariffs and that which a shipper may commit by accepting a rebate from tariffs published and filed are distinctly denounced by the statute and should not be commingled or confused in its administration."

In giving its conclusion, the court states that as far as the water company is concerned, the element which materially influenced the result in the Supreme Court case mentioned is entirely lacking in this one, "unless, indeed, the transit company's necessary concession to the carriers by railroad of their own lawful rates constituted a conventional division of all charges; and to us it seems clear that it did not."

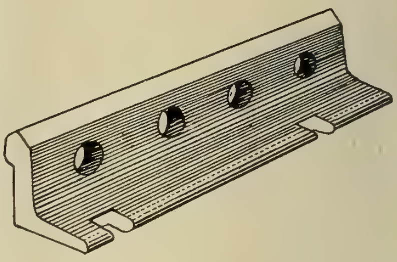
In the case of the Mutual Transit Co., convicted for granting the rebates dealt with in the foregoing, judgment was delivered at Buffalo, N.Y., Mar. 9, to the effect, that as this was a primary offence of the corporation, the motion for a new trial should be denied, and a fine of $5,000 imposed, stay of execution for 60 days being granted.

THE HAMILTON STEEL & IRON CO.
LIMITED
HAMILTON, CANADA.





AXLES
CAR AND LOCOMOTIVE
Railway Angle Bars and Track Spikes



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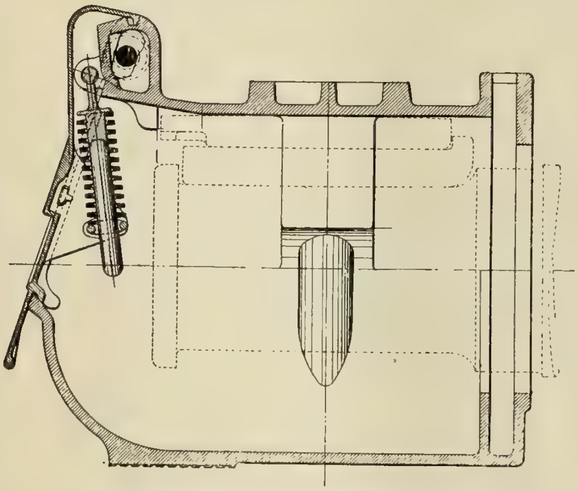
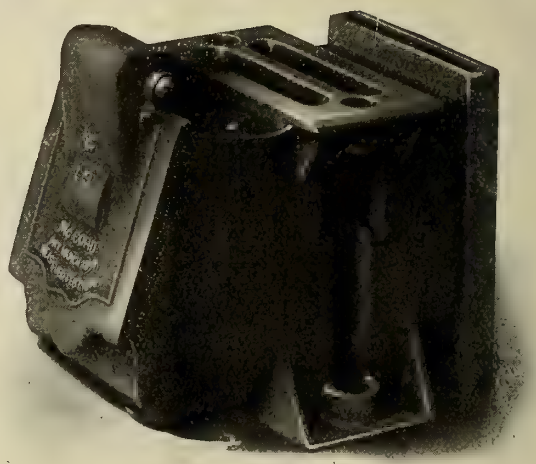


THE STRONGEST, LIGHTEST, TIGHTEST BOX MADE



The McCORD Draft Gear
The McCORD Spring Dampener
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302 St. James Street, Montreal

RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alaska Central Ry.—F. Stewart, General Manager, was in Montreal, Mar. 17, and in an interview stated that the company had constructed 19 miles of line from Seward, Alaska, and it was intended to complete the line for a distance of 35 miles. When this was done there was no doubt that a large amount of traffic would result. Mr. Stewart was on his way back to Seward, having been to London, Eng., making arrangements for the company's financial requirements. (Aug., 1907, pg. 663).

A press report, dated Mar. 23, states that Mr. Stewart has been superseded as General Manager of the A.C.R., the reason assigned relating to the financial arrangements with the Sovereign Bank of Canada, now in liquidation.

Algoma Central and Hudson's Bay Ry.—At a joint meeting of the Town Council and Board of Trade of Sault Ste. Marie, Ont., recently, it was arranged to send a joint deputation to the Ontario Government asking that steps be taken to provide additional railway accommodation for the district, particularly in the direction of the completion of the A.C. and H.B.R. to a junction with the G.T. Pacific Ry. It was decided to ask the Ontario Government to regrant 5,000 acres and $20,000 a mile to construct the line from the projected junction with the C.P.R., to a junction with the G.T. Pacific. The deputation will also ask the Dominion Government to give a special cash subsidy to the A.C. and H.B.R., for the construction of the more northerly portion of the line.

A public meeting was held Mar. 16 at Sault Ste. Marie, at which a delegation was appointed to interview the Ontario Government with the object of obtaining a guarantee of the company's bonds upon the surrender of the land grant in order that the line might be completed to the National Transcontinental Ry., or for the Government to take over the railway and extend it as a colonization railway. After presenting their views Mar. 20, the Premier in reply said, while the Government believed that the time for stopping the general bonusing of railways had arrived, there were cases where exceptions might reasonably be made. In 1907, the Government renewed the money grant to the railway, and now it was asked to renew the land grant also. Good and strong reasons would have to be submitted before the Government could give a favorable consideration to the proposal. (Mar. pg. 179.)

Atlantic, Quebec and Western Ry.—An inspection of the work completed and in progress on this line has been made by Earl Ranfurly, Vice-President, who returned to London, Eng., Mar. 1. J. X. Lavoie, the Canadian Vice-President, stated, in an interview at Montreal, that the A., Q. and W. Ry. Co. had given Galindez Bros., the London bankers, $2,000,000 for the old Baie des Chaleurs Ry., and expected to get a clear title to the line by May. It was, however, expected that it would cost about $1,000,000 to put the line so bought into good shape. The company had already constructed 20 miles of an extension towards Gaspe, and had an additional 80 miles under contract. About 850 men have been employed, and this number is to be increased at once. One of the most important features of the work is the piercing of a tunnel at Cap l'Enfer, some 850 ft. through a limestone rock. About one-third of this rock work is already completed, and it is expected that the whole will be concluded some time in June. The right-of-way is almost cut away right through to Gaspe, and the whole line is down for completion some time during the fall of 1909. There are about 26 bridges on the lower section of the line, and all of these are to be built of concrete and steel. The terminal arrangements for Gaspe are of a very formidable nature, as the promoters are sanguine of being able to give to the Province of Quebec another winter port. The passenger station at Gaspe Basin will be located at the foot of Fort Ramsey, but the freight terminals are to be at Sandy Beach, about four miles from the town, where there are excellent facilities for a first-class port. Wharves can be built that will give 40 feet of water, with good shelter at all times. The company also proposes to erect a number of hotels on the route with the object of developing the tourist traffic. The question of a steamship line to Europe is also discussed, notwithstanding the non-success of previous attempts to establish one. (Feb., pg. 97.)

Canadian Minnesota Bridge Co.—It is reported that traffic will be operated over this bridge across the Rainy River, near Fort Frances, Ont., April 1. (Jan., pg. 19.)

Crow's Nest and Northern Ry.—The British Columbia Legislature, at its current session, passed an act incorporating a company with this title, for the purpose of constructing a railway from the C.P.R. at the Crow's Nest Pass, B.C., to or near the summit or divide between the waters of the north fork of Michel Creek, and the water of Grave Creek, via the west side of the north fork of Michel Creek, to the confluence of the two north branches of the creek, and thence by both branches to points near the divide. The capital is fixed at $2,000,000, and it is authorized to issue bonds to the extent of $30,000 a mile of railway constructed. Agreements may be made with other railway, steamship, transportation, telegraph or other companies, to lease or convey its undertaking either in whole or in part. The company is also authorized to carry on a general telegraph, telephone and express business. The provisional directors are: R. G. Belden, J. H. Hemphill, C. L. Butterfield, A. E. Wayland, Spokane, Wash. (Jan., pg. 19.)

Detroit River Tunnel.—Replying to a question in the House of Commons recently the Minister of Customs said the material used in the construction of the Canadian end of the international tunnel at Windsor, Ont., was being admitted free under item 596 of the Customs Tariff of 1907. This item was a new provision; remission of duty on materials used in Canada for international bridges and tunnels was formerly by Order-in-Council under the Audit Act. A protest on behalf of Canadian manufacturers has been made to the Government particularly in regard to the steel and cement to be used in the 0.75 of a mile of tunnel to be constructed inland from the submarine portion of the tunnel. (Mar., pg. 179.)

Eastern British Columbia Ry.—An act has been passed at the current session of the British Columbia Legislature incorporating a company with this title to construct a railway from the south fork of Michel Creek, at the loop on the C.P.R. Crow's Nest branch, southerly up the creek to the mouth of the east fork, thence along the same easterly and southerly to the southerly boundary of lot 6,999, group 1, Kootenay district, a distance of 14 miles. A clause is added to the section defining the route, setting forth that nothing in the act or in the Railway Act, "shall be deemed to authorize the company to build any branch line to any point nearer the International boundary than the southern boundary of lot 6,999." The capital stock is fixed at $750,000; and bonds to the extent of $30,000 a mile may be issued. The company is given power to enter into agreements with other companies. The provisional directors are: D. C. Corbin, J. K. O. Sherwood, A. T. Herrick and J. A. Harvey. (Jan., pg. 19.)

Fort William Terminal Ry. and Bridge Co.—The rules of the House of Commons with respect to private bills were suspended by resolution in order to allow of the introduction of the bill granting an extension of time for the construction of the line and bridges at the current session. The reason assigned for the application is that the question of street and railway crossings within the city of Fort William had still to be decided by the Board of Railway Commissioners, and that some delay may be experienced in getting these questions settled.

The local company is reported to have sold out its charter and franchises to one of the trunk lines, but the report has not been confirmed. (Mar., pg. 181).

Great Northern Ry.—A Winnipeg despatch says the G.N.R. staff is moving from its Main St. offices to new premises on Portage Ave. Other despatches state that several parties of engineers have been placed in the field between Brandon, Man., and Calgary, Alta., with the object of locating a line about midway between the International boundary and the C.P.R.

A. Guthrie, the St. Paul, Minn., contractor, stated in Vancouver, B.C., recently, that the extension of the Vancouver, Victoria and Eastern Ry. from Michel through the Crow's Nest Pass would probably be completed by April 1. This is the first time that the V.V. and E. Ry. has been mentioned in connection with the line in the vicinity of Michel, all previous references to the latter having been that it was an extension of the Crow's Nest Southern Ry., which runs from Fernie, B.C., to a junction with the G.N.R. at Rexford, Mont. Another extension, said Mr. Guthrie, was being planned in that district, but he declined to discuss it. Tracklaying is reported to be in progress on the V.V. and E.R. between Keremeos and Headley City, B.C., about 20 miles. Slow progress is being made and it is not expected that the work will be completed before May. There are three crossings of the Similkameen River, and the bridge work is causing some delay. The company has given notice of its intention to construct spur lines to mills on the water front between New Westminster and Port Kells. (Feb., pg. 97).

Halifax and Northeastern Ry.—Replying to a question in the Legislature, Mar. 4, the Minister of Public Works stated that the Government had not paid for any surveys made by the company, neither had the company paid for any of the surveys made by the Government. It was not the intention of the Government to compel the repayment, in whole or in part, of any of the money it had expended upon surveys. The surveys made by the Government since 1906 were location surveys. Owing to the fact that preliminary surveys had been made in 1906 jointly by persons proposing to undertake the enterprise and the Government, the Government were able in some cases to locate the line without preliminary surveys. The surveys were started about April, 1907, and were completed. The line had been located through the Musquodoboit Valley, down the West River, St. Mary's and Salmon River to Guysborough town, with a branch from Cross Roads, Country Harbor, to Country Harbor. Also a line from Sunny Brae down the East River St. Marys', connected with the other line at or near Melrose. The total expenditure by the Government on this survey and for plans profiles, etc., to Feb. 25, was $29,326.34. The whole liability for this to Feb. 25 had been paid. The estimated expenditure to complete the surveys would be about $1,000. The above return included all the expenditures asked for, said the Premier, but there had been $34,478.65

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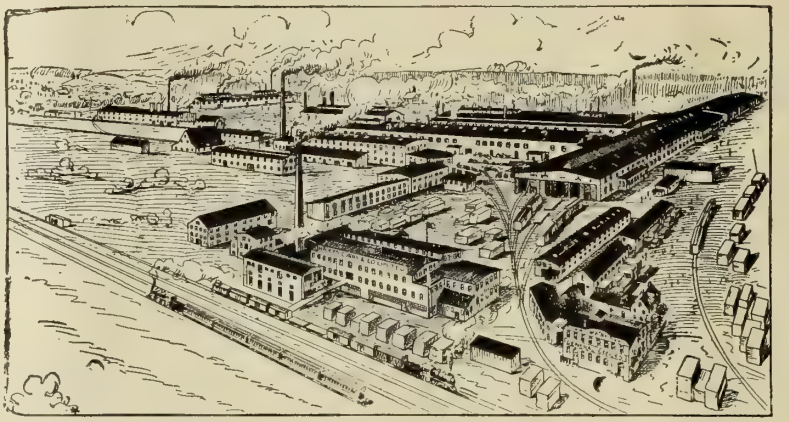

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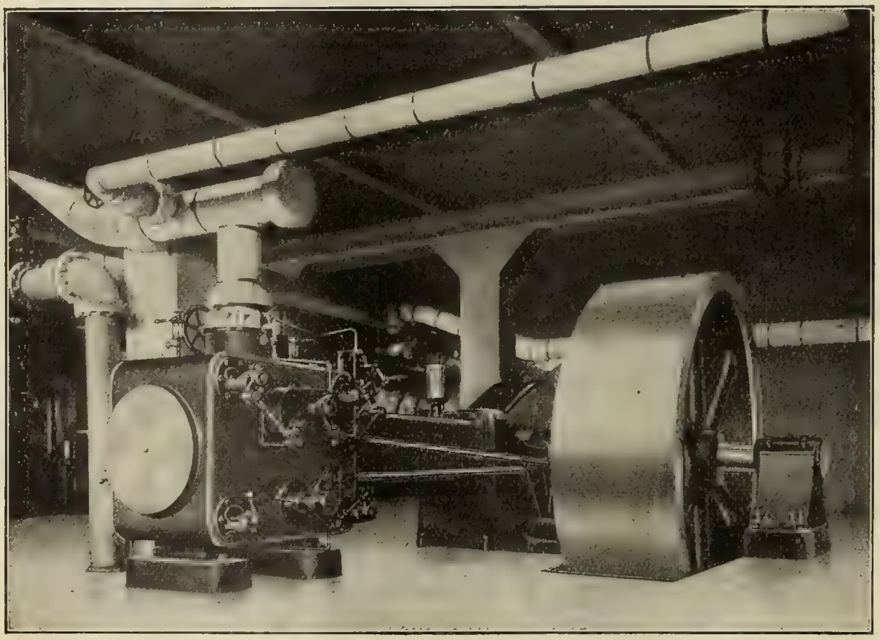

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paid by the Government for surveys, made in 1906 jointly by persons proposing to undertake the enterprise and the Government. These persons agreed to pay one-half the cost of the survey. They paid a portion of the expenses of the survey themselves. The Government expected to receive payment of the balance shortly. The plans and profiles of surveys had been completed. A full report would be laid before the House. The questions of proceeding with the work of construction this year was under the consideration of the Government. (Mar., pg. 181).

Hudson Bay Pacific Ry.—An act authorizing the incorporation of a company with this title has been passed at the current session of the British Columbia Legislature. The provisional directors are: D. B. May, Seattle, Wash.; L. E. Bensen, Goldfield, Nev.; J. McLachlan, Los Angeles, Cal.; W. H. Duval, W. H. Harding, Jr., New York City. The company is authorized to construct a railway from near Port Simpson or Work Channel, B.C., to the eastern boundary of the Province, via the south-western side of Work Channel to the Skeena River; along the north bank of that river to Hazleton; thence to the junction of the Buckley River; up the right bank of this river eight miles to the Suskewa River; along this river by a low divide to the head of Babine Lake; thence to the north end of Stuart Lake; thence north of McLeod Lake to the Misnichinca River, by Summit Lake to Pine River Pass, northwesterly to the head of Pine River, along the same to Moberly's Lake, and thence along the Peace River valley. Power is also given to construct branch lines not exceeding 20 miles in any one case. The capital is fixed at $3,000,000, and bonds to the extent of $25,000 a mile of line may be issued; it is also given power to promote the incorporation of any other company beneficial to its interests, and to enter into agreements with other companies. (Mar., pg. 186.)

Intercolonial Ry.—At a public meeting held at Parrsboro, N.S., Feb. 26, a resolution was passed asking the Dominion Government to construct a loop line from Amherst to Truro, via Parrsboro. The only opposition offered at the meeting was on behalf of the Standard Coal and Ry. Co., which was incorporated by the Nova Scotia Legislature in 1903. It has power to construct a railway from Athol to Parrsboro, and thence to Truro, with a branch to tap the coal mines at River Hebert, N.S.

The Minister of Railways replying to a question in the House of Commons recently said no surveys had been made by the Government for proposed railways between Truro and Parrsboro, via Five Islands; between Truro and Brule, or between Truro and Upper Stewiacke, N.S.

The work of rearranging the yard accommodation at Stellarton, N.S., will be started early in the spring. The work includes, among other things, the putting in of a concrete floor in the machine and blacksmith shop at the roundhouse, a complete sewerage system, a new sand drying house, and an electric lighting plant. This plant, it is intended, will be large enough to light the yards and buildings at New Glasgow and Westville as well as at Stellarton. It will necessitate the erection of about six miles of pole line. (Mar., pg. 181).

Ladysmith Lumber Co.—An act has been passed at the current session of the British Columbia Legislature authorizing the Ladysmith Lumber Co. to construct and operate for 12 years a line from 500 yards north of the Comox wagon road crossing in Newcastle townsite, following the old Eastern Wellington right-of-way, or nearly so, until it reaches the Government-gazetted wagon road in Mountain district, thence northwesterly for two miles, more or less; and branch lines of not more than one mile. The railway is to be used as a private railway of the company in conjunction with its general logging, lumbering and manufacturing business and the transportation of such other freight as may offer along the line, and it is provided that the company shall have no power to carry on a general public telegraph, telephone, express or passenger business. The company may enter into agreements with any railway company for the construction and operation of the railway. (Feb., pg. 99.)

Little Nation Ry.—This railway as projected will have a length of about 70 miles, and will run from Papineauville on the C.P.R. Montreal-Ottawa line, along the valley of the Little Nation River to Nominingue, on the C.P.R. Northern Colonization Ry., which is now being extended to Maniwaki, on the C.P.R. Gatineau Valley Ry. For the first 20 miles, as far as Cheneville and Preston, the line will run through a well-settled district, and beyond will open up a large area of unsettled territory. The company, we are advised, is prepared to proceed with the construction of the line as soon as Government subsidies have been secured. Following are the officers and directors for the current year: President, Rev. J. P. Belanger, St. Andre-Avelin, Que.; Vice-President, E. Rochon, Papineauville, Que.; Chief Engineer, H. Lefebvre, Cheneville, Que.; other directors: A. O. Belanger, Papineauville; N. Chene, St. Andre; A. C. Guillaume, H. Baulue, Cheneville; Secretary-Treasurer, J. A. Gadoury, Cheneville. (Dec., 1907, pg. 889).

Magdalen River Valley Ry.—Application will be made to the Quebec Legislature for an act authorizing a change in the point of location and route of this projected railway; and giving power to construct a line of less than standard gauge.

We were advised Mar. 12 that the amendment of the act for which the company is asking affects the location of about 0.25 mile of the line. A good deal of construction work is reported to have been done during 1907. M. Mullen, C.E., Bangor, Me., is President of the company.

A second notice respecting this company has been issued by Pentland, Stuart and Brodie, solicitors, Quebec, who are acting on behalf of Frank Ross of that city. It sets forth that application will be made at the current session of the Quebec Legislature for an act amending sections 4 and 16 of the act of 1907, to make the same conform to the bill as passed by both houses of the Legislature, and more particularly by limiting the right to construct branch lines. (Sept., 1907, pg. 663).

Manitoulin Island.—C. N. Smith, member of the Ontario Legislature for Sault Ste. Marie, is advocating the construction of a railway on Manitoulin Island by the Ontario Government. He suggests that a line be constructed from Little Current, the principal village on the island, to a junction with the Manitoulin and North Shore Ry. at Espanola, on the mainland, a distance of about 30 miles. The cost of such a line, is is estimated, would be about $750,000. Manitoulin is an island 80 miles in length by 22 in width, and has a population of over 18,000. There is at present only communication with the mainland by boat in summer, and over the ice in winter. There is a large area of land on the island suitable for ranching and mixed farming.

The Manitoulin and North Shore Ry. Co. has a charter to construct such a line, and has made surveys to Little Current.

At a meeting of the associated municipalities of the island, Mar. 11, a resolution was passed asking the Ontario and Dominion Governments not to extend charter rights or subsidies beyond July of the present year; and expressing an opinion that the Ontario Government should undertake the construction of a railway on the island, the Manitoulin and North Shore Ry. having failed to do anything under its charter. R. R. Gamey, M.P.P., stated to the meeting that the Minister of Public Works for the Province had informed him that if the company failed to construct the line within the time limit the Government would take the matter in hand and construct a line so as to give connection with the C.P.R.

Northern Empire Ry.—The Dominion Parliament is being asked at the current session for an act incorporating a company with this title to construct a railway from the International boundary east of Cardston, Alta., northerly through Lethbridge to Fort McMurray, thence generally northwesterly through or near Fort Vermillion to the boundary between British Columbia and Yukon at or near Lower Post, B.C.; thence via Dawson to the International boundary between Yukon and Alaska. Power is also being asked to construct a branch line from the main line, following generally the north bank of the North Saskatchewan River to Edmonton, Alta.; to issue securities to the extent of $30,000 a mile, and to enter into agreements with the C.P.R., the Canadian Northern Ry., and the G.T. Pacific Ry. The persons named in the bill as provisional directors are H. Roy, R. Balfour, Ottawa; J. J. B. Gosselin, Notre Dame de Stanbridge, Que.; J. J. Flutot, Frank, Alta., and E. Hoffman, New York City. (Aug., 1907, pg. 563).

North Atlantic Mining Co.—Press reports state that this company is about to erect a number of cottages at Port Morien, N.S., and to start construction of a railway to the mine at Long Beach. The route for this was surveyed some time ago.

Nova Scotia Eastern Ry.—In the speech at the opening of the current session of the Nova Scotia Legislature recently, the Lieutenant-Governor said during the past year extensive surveys were made on the line of the proposed Halifax and Guysborough railway, under the supervision of the Government. These surveys are practically complete. The financial condition which developed during the past year made it difficult to successfully negotiate for the construction of this line of railway with any responsible company. It is hoped that during the present year the financial situation may be sufficiently improved to enable the Government to conclude a contract for the construction of this work upon reasonable terms. (July, 1907, pg. 479).

Pacific and Atlantic Ry.—Notice is given that application will be made at the current session of the Dominion Parliament for an act granting the provisional directors the powers given them by chap. 76 of the Statutes of Ontario, 1886, and chap. 120 of the Statutes of Ontario, 1900; authorizing the organization of the company, the first election of directors, and for more clearly defining the route of the railway, and for extending the time for the commencement and completion of the projected railway. (Feb., pg. 99.)

Port Hood-Richmond Ry. and Coal Co.—H. A. Morine, Manager Port Hood Coal Co., stated in Halifax, N.S., recently, that the work of double-tracking to the slope is being pushed and will be completed in a short time. The company is installing two additional boilers at the bankhead, and one at the pier. The latter will be used for operating the loading belts. (May, 1907, pg 327).

Quebec Central Ry.—We are officially advised that there is nothing definitely settled as yet in regard to the further extension of the line beyond St. George, Beauce, Que. It is, however, expected that a decision will be reached shortly. (Feb., pg. 99).

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Quebec and Lake St. John Ry.—Application will be made this session of the Quebec Legislature for an act granting an extension of time within which the branch lines and extensions authorized may be constructed. (Mar., pg. 183.)

Temiskaming and Northern Ontario Ry.—A return was laid on the table of the Ontario Legislature, Mar. 3, showing the work done and payments made to McRae, Chandler and McNeil, on account of the construction of a 40 mile section of the line. The total value of work done to Jan. 1 was $140,373.60, of which the Commission retained 10%, or $14,037.36, leaving a balance of $126,336.24. The amount paid to the firm was $100,553.08, while the amount still due was $2,768.25. The Commission is taking over the work, thus cancelling the contract. The Government have as security for the due performance of the contract $10,000 in cash, together with the drawback of ten per cent., $14,037.36. The estimated amount due for work done in Jan. is $23,014.91. The reason for this action, it is understood, is that the contractors have failed to carry out the provisions of their contract with regard to the period within which the work was to have been completed. Ever since the contract was undertaken the prevailing climate conditions have been such as to seriously hamper the advancement of work. At Driftwood last summer the longest continuous spell of dry weather was two and a half days. The line over which the contractors are working is clay soil, and they claim that the wet weather has prevented them from working. They have also experienced difficulties with regard to obtaining a sufficient supply of labor. The point at which the contract began is about 100 miles north of New Liskeard, and extends to the junction point with the G.T. Pacific Ry.

The Kerr Lake branch was reported to be practically completed in March. (Mar., pg. 185.)

The Treasurer of Ontario, in his budget speech Mar. 20, said the railway was now operating over 130 miles, with steel laid for 70 more, and the grading for rails done in an additional ten. By Sept. 15 it was hoped to effect the junction with the G.T. Pacific Ry. Some delay had been occasioned in the bridges by a bridge company which had held the work back. Besides several branch lines were now operating

Toronto, Hamilton and Buffalo Ry.—It is proposed to construct a steel bridge with concrete abutments on the line at Cainsville, Ont. (Mar., pg. 185.)

Tusket Wedge Ry.—Replying to questions in the Nova Scotia Legislature Mar. 5, the Minister of Public Works said a survey had been made for a railway from the Halifax and Southwestern Ry., near Salmon River, in Yarmouth county, to near Tusket Wedge, about 7½ miles. The cost of the survey was $714.15. The population to be served would be about 5,000. The Government gave no assurance that the proposed railway would be built, but informed the Halifax and Southwestern Ry. Co., that they would grant them a subsidy if they would undertake the work. There was no correspondence on the subject. There was no proposal at present to deal with the matter during the present session. (May, 1907, pg. 327.)

Vancouver Island and Eastern Ry.—Application is being made at the current session of the Dominion Parliament for an act incorporating a company with this title to construct a railway from Esquimalt Harbor, Vancouver Island, B.C., by the most practicable route northerly, to Seymour's Narrows, and from Bute Inlet or Frederick Inlet on the mainland of British Columbia easterly through the Yellowhead Pass to Edmonton, Alta., with power to operate a ferry or ferries across the Narrows to connect the two sections of line. The capital of the company is placed at $2,000,000; it may issue bonds to the extent of $30,000 a mile of railway; develop and utilize electric power; carry on a general navigation business, and construct telegraph and telephone lines. Power is also being asked to enter into agreements with the C.P.R., the Canadian Northern Ry., and the G.T. Pacific Ry., or either of them. The provisional directors are: T. W. Paterson, R. C. Lowe, T. J. Jones, H. A. Munn, Victoria, B.C.; Jas. Smith, Edmonton, Alta., and M. J. Haney, Toronto. (Jan., pg. 23).

Vancouver and Nicola Valley Ry.—The British Columbia Legislature has passed an act at its current session incorporating a company with this title, for the purpose of constructing a railway from near Nicola Lake along the valley of the Nicola River, by the most feasible and practicable route, to the junction of the Nicola and Coldwater rivers; thence along the valley of the latter river to the divide of the Coquihalla River; along that river to its junction with the Fraser River at or near Hope; thence along the south shore of the Fraser River to the railway bridge at New Westminster. Power is also given to construct branch lines and tramways, and to operate ferries, and steam and other vessels. The capital is fixed at $5,000,000, and bonds to the extent of $30,000 a mile may be issued. The company may enter into agreements of various kinds with other railway, navigation, or other companies. (Feb., pg. 99.)

Winnipeg City Power Plant.—The Winnipeg City Council has decided to push ahead as fast as possible during the current season with the construction of the tramway in connection with its projected power plant. W. M. Scott, field engineer on the work, reported to the council, Mar. 5, that the concrete piers of the bridge over the Winnipeg River were completed. Four spans of the superstructure were finished and four others were nearing completion. The bridge is expected to be ready for the resumption of tracklaying early in April. Tenders have been asked for the supply of 500 tons of 56-lb. rails with the necessary fastenings, to be delivered by April 30 at Lac du Bonnet. Tenders have also been asked for the supply of a second-hand bridge for the crossing of the Pinawa channel. The specifications provide for a single track, through truss, two-span steel bridge, one span 155 ft. to 165 ft., and one of 100 ft. to 115 ft., and sufficient strength to carry a 10-wheel locomotive with 34 tons on a rigid wheel base of 14 ft. 10 in., followed by a rolling load of 3,000 lbs. per lineal foot of track. The total expenditure on the power plant to Oct. 1, 1907, was reported to have been $576,000. The council ordered a detailed statement of the cost of the works to be prepared. (Mar., pg. 185.)

The Winnipeg Board of Control has recommended the acceptance of the tender of J. J. Gartshore, Toronto, for the supply of 500 tons of rails with the necessary fastenings, delivered at Lac du Bonnet, for the construction of the tramway in connection with the city's power plant project. The price is $39 per ton.

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A proposition is under consideration by the merchants of London, Ont., to establish a cartage company to operate in the city, owing to the increase in cartage rates which went into effect Mar. 15.

The Department of the Interior has approved of the form of agreement for the sale and use of water for irrigation by the C.P.R. in connection with its irrigation works in the Bow River district, Alberta.

Transportation Interests in Parliament.

Following are some of the principal laws affecting transportation interests under discussion in the Dominion Parliament and the Provincial Legislatures:

DOMINION PARLIAMENT.

With regard to the bill introduced by J. W. Barr, respecting the procedure to be adopted respecting the crossing of railway tracks by telegraph and other companies, the Minister of Railways stated that the total number of applications made to the Board of Railway Commissioners to carry water or gas mains under railway tracks from Feb. 4, 1907, to Dec. 1, 1907, was 215, all of which had been granted; and between the same dates there had been 65 applications to carry the lines of telegraph companies over railway tracks, all of which had been granted.

A bill to amend the Railway Act, introduced by J. A. C. Ethier, by rearranging the procedure respecting the fixing of the value of lands expropriated by railway companies.

Another bill under consideration directs the use of the French language by all railway telegraph and telephone companies or public utilities, as well as the English language, in all public announcements, and prescribes a penalty of $5 on all companies and their employes for failing to comply with this provision.

In the Senate a bill was introduced repealing Sec. 414 of the Railway Act, and substituting a new section as follows: "Every person who sells, gives or barters any spirituous or intoxicating liquor to or with any servant or employe of any company while on duty, is liable on summary conviction to a penalty not exceeding $500, or to imprisonment with or without hard labor for a period not exceeding one year, or both." The bill elicited considerable discussion in committee, and it is understood that it will be killed.

Another bill provides that railway companies be compelled to sell mileage tickets for 500 or 1,000 miles at two cents a mile; that where the buyer of such, by mistake, gets on a wrong train his ticket must be accepted, and the company must collect from the company issuing the ticket the amount due for the distance travelled by the holder, provided the two companies run trains between the points.

A bill has been given a first reading in the House of Commons providing for the repeal of sec. 270, chap. 37 of the Revised Statutes, and the substitution therefor of a section providing that all regular trains shall be started and run at regular hours fixed by public notice; fixing a penalty of $5 for each minute's delay and making the defaulting company liable for damages, unless upon proof that the delay was unavoidable. The section at present enacts that all regular trains shall be started and run as nearly as practicable at regular hours fixed by public notice.

The Water-Carriage of Goods Act is the title of a bill under consideration by the Senate of Canada, which seeks to prohibit the inclusion of certain conditions in any bill of lading for the carriage of goods between Canadian ports, or from any port in Canada to any port outside Canada. It also defines the implied warranty in bills of lading, directs the issue of a bill of lading to the shipper, provides for notice of the arrival of the vessel to the consignee, and provides for the imposition of a penalty not exceeding $2,000 and costs for each offence, the Admiralty Court to direct as to the division of the penalty between the person injured and the Crown.

A bill to amend the Irrigation Act has been under discussion in the House of Commons at the current session. Among the

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amendments which will be made if the bill becomes law will be the following to sec. 2: The substitution of the words "agricultural machinery" for "railways or factories," in sub-sec. K., and the addition of two new sub-sections—(L) Industrial purposes means the working of railways or factories by steam, but shall not include the sale or barter of water for such purposes. (M) Board means Board of Railway Commissioners for Canada. The object of a number of the amendments is to provide a procedure under which provincial and municipal authorities may obtain orders to construct streets or roads across irrigation works, in cases where the consent of owners cannot be directly obtained.

PROVINCE OF ONTARIO.

The Ontario Legislature is being asked at its current session to amend the Provincial Railway Act of 1906, by amending sec. 2, sub-sec. 18, by adding in the eighth line thereof the words, "and shall include a mortgage of said lands"; by substituting the word "owner" in place of the words "opposite party" in the first line of sec. 68, sub-sec. 6; and by adding a new sub-section 4a to sec. 87, respecting fencing railway lines adjoining highways.

A bill is also under consideration to amend the Ontario Railway and Municipal Board Act of 1906. It gives the Board power to determine any dispute arising between a street railway company and a municipality as to the location of rails in any street or highway. It also empowers the Board to say what proportion of the cost of repairing streets consequent upon the laying of rails shall be borne by the respective parties. Provision is also made for enlarging the Board's powers in such a manner as to enable it to control the heating and lighting of cars, the use of open or closed cars, the height of steps, and the type of seat and brakes to be used. These are all matters in respect of which experience is claimed to have proved that the Board's powers are inadequate or not sufficiently clearly defined.

MANITOBA RAILWAY ACT.

An act was passed at the recent session of the Manitoba Legislature amending the Provincial Railway Act in several details. There were, said the Premier in moving its second reading, a number of charters subject solely to provincial jurisdiction, and yet in so far as tariffs were concerned the companies had to submit such matters to the Railway Commission of Canada. The new act provides for the naming of an officer of the several companies to file tariffs with the Province.

BRITISH COLUMBIA.

The Railway Assessment Act of 1907 has been amended by the addition of the words "the rate of taxation to be 1% of the assessed value" after the word property in sec. 6, and the addition of the words "except as varied by this Act" to sec. 8. It is specially provided that the two amendments made shall apply to the assessment and taxation of railways for 1907 and 1908, as well as to the assessment and taxation of railways for years subsequent to 1908.

The Telegraph Operators' Regulation Act is the title of a bill under discussion at the current session of the B.C. Legislature. It provides that no operator shall be employed for a longer period than eight hours in any 24 hours, except in cases of accident or for the purpose of saving human life. Twenty-four hours is interpreted to be from midnight to midnight, and a penalty of $100 is prescribed for each offence. A bill providing for an eight-hour day for marine and shipbuilding workers, and prescribing for a penalty of like amount is also under consideration.

G.T.R. Betterments, Construction, Etc.

Blue Bonnets Switch.—A special spur has been completed at St. Laurent connecting with the Montreal Park and Island Ry., so that trains for the Blue Bonnets track can be brought in from the G.T.R.

Ottawa Terminals Ry.—A meeting of the shareholders was called to be held at Ottawa Mar. 26 for the purpose of organization and the election of officers.

The result of the discussion by the Ottawa City Council as to the amended plans for the projected terminal station and hotel, was the passing of a resolution Mar. 6, giving the G.T.R. until April 15 to revise the plans of the station in several details. E. H. Fitzhugh, Third Vice-President, in explanation of the plans and models, said on the basis of the present plan the hotel and equipment would cost $1,525,441, and the station $1,177,517. The latter includes the train sheds, baggage annex and concourse. The models showed the erections as originally proposed and the plans were the same, except that the office wing had been cut off the station building. To erect it would greatly exceed the appropriation, but the building would be so constructed as to permit the extra wings to be put on whenever required.

Toronto Union Station.—The arbitrators appointed in connection with the appropriation of the Eckardt Casket Co.'s premises in the burnt-out district of Toronto, has given that company $16,000. The G.T.R. offered $5,000, and the Eckardt Co. claimed approximately $100,000. The arbitrators have not included any compensation for the value of the right of renewal of the lease. It is considered likely that there will be an appeal.

London, Ont., Improvements.—The new coal chutes have an elevation of 30 ft. from base to base of rail. The structure is comprised of pile foundation with framed timber bents. Between these bents are arranged pockets with hopper bottoms to throw coal to retaining doors. These hoppers are lined with sheet steel. The retaining doors are so arranged that they are made to slide up and down at will for the purpose of coaling engines, the operator simply pulling or slacking a chain attached to a lever, this in turn being attached to retaining door. Outside of the retaining door is an apron hinged on Z bars, which are attached to the building and form guides for retaining door. This apron is held in position by four weights, one large and one small on each side, so arranged that when the operator pulls down the apron he has only one weight on each side to pull until the apron reaches a certain position, when other weights take it up, and when putting the apron up, it works the opposite way, thereby making it easy to raise and lower aprons so that one man can operate them quite easily, they being practically on a balance. The chutes are 156 ft. long, containing 20 pockets and aprons, 10 on each side, and the track is so arranged that engines coal up on both sides of the chutes, and on the end are two large sand bins with capacity of 600 cubic yards. Between these bins is a sand room where the sand is dried, then forced by compressed air up into small bins, and from these bins by gravitation to locomotives on either track. Four 110,000 capacity cars can be handled in the chutes at one time. The storage capacity of the chutes is 800 tons. At the work end of the chutes is a pile trestle ramp, on which cars are pushed up into the chutes, one engine handling four cars at a time. The largest engines can now be coaled in two minutes.

Buffalo, Rochester and Eastern Rd.—Application is being made to the New York State Public Service Commission for a certificate of necessity for the construction of a line which R. D. Gillett, President, said was to connect the Boston and Maine Rd., at Troy, with the G.T.R. at Buffalo, N.Y. Press despatches said the G.T.R. was behind the matter, and the line when constructed would form a G.T.R. loop. C. M. Hays, Second Vice-President, and General Manager, stated recently the G.T.R. had no interest in any one of these projects, and had plenty to do in Canada in pushing forward to completion the G.T. Pacific Ry. A subsequent announcement is to the effect that the company's plans have been amended so as to enter Niagara Falls by a new line from Tonawanda, and that the western business of the line will be handled by the G.T.R.

Grand Rapids and Northwestern Rd.—A company with this title has filed articles of incorporation at Lansing, Mich. The railway proposed to be constructed will shorten the haul between Grand Rapids and Ladington. Car ferries will be operated between Ladington and Milwaukee, Wis. At Grand Rapids connection will be made with the G.T.R., which company, it is stated, is behind the new project.

Grand Trunk-Milwaukee Car Ferry Co.—The first landing by the car ferry Grand Haven at the new slip and terminals of the G.T.R. at Milwaukee, Wis., was made Feb. 28. The new terminals cover 23½ acres, and have just been completed. They comprise an elaborate system of side tracks, switching tracks, a new slip and apron. (Mar., pg. 201.)

The Madeira-Mamore Rd. has been incorporated under the laws of the State of Maine for the purpose of constructing a metre gauge railway around the falls and the rapids extending about 250 miles from the headquarters of the Madeira River, which flows into the Amazon, about 3,000 miles from the north coast of Brazil. W. Mackenzie, President Canadian Northern Ry., Toronto, and associates are reported to be interested in the proposition. The new line when completed will result in the connection of the Republic of Bolivia with navigation on the Amazon River.

The Fuel Transportation Co. was the title of a company for the incorporation of which the Manitoba Legislature was asked at its recent session to pass an act. The proposal of the company was to construct and operate a line of sluice boxes, drains, tramways or mono-railway between Winnipeg and Lake Winnipeg, or any points on the Red or Assiniboine Rivers, and any other point in the Province. It was intended to carry freight of all kinds, and was primarily intended as a cheap method of bringing fuel from the northern part of the Province by pipes or sluice boxes to Winnipeg. A number of such concerns were reported to be in successful operation in the Western States. The Legislature committee asked for further details and plans, which the applicants were not able to supply, and it was decided not to report the bill.

The railway companies put in force in Toronto, Mar. 15, an advance in cartage charges on freight first to fifth class Canadian classification of from 1½ to 2% per 100 lbs., and smalls from 12 to 15c. each.

In an action brought by a Mrs. Brigamason against the Intercolonial Ry., in the State Court at Boston, Mass., to recover damages for injuries received through the sudden starting of a train at Moncton, N.B., it has been decided that the action was virtually against the King, and under the law of nations the Court had no jurisdiction. Funds of the Intercolonial Ry. in the hands of the railways at Boston were attached in order to secure the bringing of the action.

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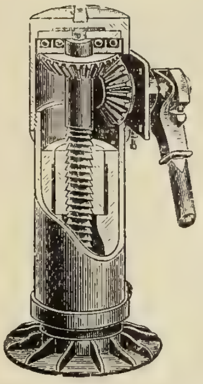
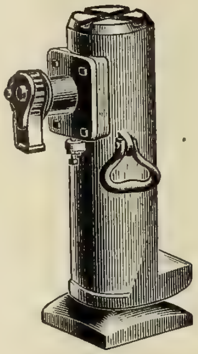

Sectional View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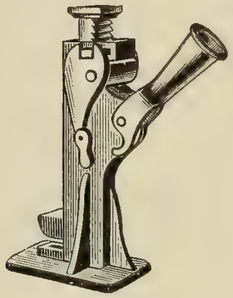
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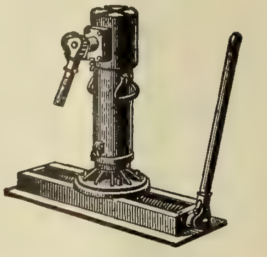
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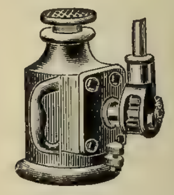
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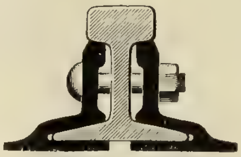
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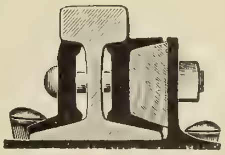
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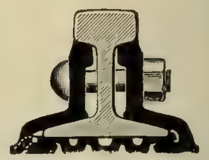
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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

4371. Feb. 4.—Authorizing C.P.R. to construct a spur line to the Red Deer Milling and Elevator Co.'s premises, Red Deer, Alta.

4372. Feb. 18.—Extending until June 15, 1908, time within which G.T.R. shall construct crossing on S. B. Carew's farm, Emily tp., Ont.

4373. Feb. 22.—Authorizing Bell Telephone Co. to erect wires over G.T.R. siding to Standard Chemical Co., south of Longford station, Ont.

4374. Feb. 7.—Ordering Quebec, Montreal & Southern Ry. to change the existing derails at and near junction of Rutland Rd. and G.T.R. at Noyan Jct., Que.

4375. Feb. 18.—Authorizing Windsor, Essex & Lake Shore Rapid Ry. and Pere Marquette Rd., to operate their trains over the crossing between their respective railways at Pelton, Ont.

4376. Feb. 21. — Authorizing Canadian Northern Ontario Ry. to erect telegraph wires across Canada Atlantic Ry. tracks at Boyne River, Ont.

4377. Feb. 19.—Authorizing C.P.R. to use 0.116 of an acre of Canadian Northern Ontario Ry. lands for the purpose of diverting existing highway from Parry Sound to Bala, in Medora tp., Ont.

4378. Feb. 20.—Authorizing C.P.R. to divert existing highway from Parry Sound to Bala, in Medora tp., Ont., where it crosses spur of C.P.R. Romford branch, from mileage 123.18 to Lake Joseph.

4379. Feb. 22. — Extending for three months from Feb. 22, 1908, time within which G.T.R. is authorized to take certain lands from the City of Toronto for the purpose of a passenger station and yards.

4380. Feb. 21.—Authorizing Windsor, Essex & Lake Shore Rapid Ry. to operate cars across Pere Marquette Rd. tracks, near Kingsville station, Ont.

4381. Feb. 17.—Authorizing G.T.R. to take certain lands belonging to G. Knill, in Blenheim tp., Ont.

4382. Feb. 25.—Authorizing Dominion Car & Foundry Co. to construct a sewer under tracks of G.T.R., Lachine canal bank branch.

4383. Feb. 4. — Authorizing Canadian Northern Ontario Ry. to divert Montreal and Ottawa Road, in Clarence tp., Ont., at mileage 37.13 from Hawkesbury, Ont.

4384. Feb. 25.—Approving revised location of G.T. Pacific Ry., from west line of section 30, tp. 53, range 9, west, to west line of sec. 7, tp. 54, range 13, west of 5th meridian, North Alberta, mileage 78.109 to 103.00.

4385. Feb. 25.—Authorizing C.P.R. to reconstruct bridge 18.2 on its Brockville, Ont., section.

4386. Feb. 25.—Approving Schomberg & Aurora Ry. Co.'s by-law authorizing W. H. Moore, General Manager, to prepare and issue tariffs of tolls to be charged for traffic carried upon the line.

4387. Feb. 26.—Authorizing North American Telegraph Co. to carry wires across G.T.R. track at Campbellford, Ont.

4388. Feb. 26.—Extending until June 1, 1908, time within which North American Telegraph Co. shall file and receive approval of its tariffs of tolls.

4389. Feb. 26.—Extending until June 1, 1908, time within which Bell Telephone Co. of Canada shall file and receive approval of its tariffs of tolls.

4390. Feb. 26.—Extending until June 1, 1908, time within which express companies in Canada shall file and receive approval of the Board of their tariffs of tolls.

4391. Feb. 25.—Authorizing Lindsay, Bobcaygeon & Pontypool Ry. to cross G.T.R. spur line at Lindsay, Ont.

4392. Feb. 21.—Authorizing Windsor, Essex & Lake Shore Rapid Ry. to operate its cars across Pere Marquette Rd. tracks at Lansdowne Avenue, Kingsville, Ont.

4393, 4394. Feb. 25.—Authorizing Georgian Bay & Seaboard Ry. to divert certain public highways in Tay tp., Ont.

4395. Feb. 27.—Extending until Mar. 15, 1908, the time within which order 3346, dated July 5, 1907, shall come into effect, with respect to application from the G.T.R. Co. for leave to prosecute before the Judicial Committee of the Privy Council an appeal from the judgment of the Supreme Court of Canada as regards the application of W. N. Robertson of Toronto, Ont., in what is known as "The Penny Fare Case."

4396. Feb. 28.—Approving revised location of G.T.R. from Richelieu River to near the public road crossing between Ranges 1 and 2, St. Hilaire parish, Que.

4397. Feb. 4. — Authorizing Canadian Northern Ontario Ry. to take part of east half of lot 33 in Clarence tp., Ont.

4398 to 4400. Feb. 28.—Authorizing various Bell Telephone Co. crossings over C.P.R.

4401. Feb. 28.—Authorizing G.T.R. to construct bridge over Otterburn park road, near St. Hilaire, Que.

4402. Feb. 28.—Approving revised location of G.T. Pacific Ry., Lake Superior branch, from mileage 0 to 50 in Ontario.

4403. Feb. 28.—Approving revised location of G.T. Pacific Ry. from mileage 50 to 100, near White Fish Lake, Ont.

4404. Feb. 28.—Approving revised location of Le Chemin de Fer de Colonization du Nord, between Nominingue and ten miles northwesterly therefrom, in Quebec Province.

4405. Feb. 28.—Authorizing G.T.R. to construct bridge over public road at milepost 21¼, Belœil, Que.

4406. Feb. 27.—Approving amended location of Hamilton, Waterloo & Guelph Ry. through City of Hamilton.

4407. Mar. 6.—Approving location of Montreal & Southern Counties Ry. from near Victoria St., St. Lambert, to east side of Common St., Montreal, 2.83 miles.

4408. Mar. 3.—Authorizing Clarenceville & St. Thomas Local Telephone Co. to carry its wires across Rutland & Noyan Ry., at Voxburgh crossing, St. Thomas parish, Que.

4409. Mar. 6.—Approving revised location of G.T. Pacific Ry., Lake Superior branch, mileage 134 to 150, English River to Surprise Lake, Ont.

4410. Mar. 6.—Approving revised location of G.T. Pacific Ry., Lake Superior branch, from White Fish Lake to English River, Ont., mileage 100 to 134.

4411. Mar. 6.—Authorizing C.P.R. to construct spur to city of Calgary's premises, Alberta.

4412. Mar. 6.—Authorizing C.P.R. to construct a spur line across Huron Street, Toronto, and thence to P. Burns & Co.'s premises.

4413. Mar. 6.—Authorizing C.P.R. to construct spur line across Huron St., Toronto, on southerly side of the three existing tracks across the street.

4414. Mar. 5.—Authorizing Bell Telephone Co. to erect its wires across tracks at Grasshill station, Ont.

4415. Mar. 6.—Authorizing C.P.R. to construct spur lines in Vancouver, B.C., and to carry them across Victoria Drive and Cambridge St.

4416. Mar. 6.—Certifying to corrections made in location of Quebec, Montreal & Southern Ry., in Gentilly and St. Pierre les Becquets parishes, Que.

4417. Mar. 6.—Authorizing the Kosheé-Sparrow Lake private telephone line to erect wires over G.T.R. tracks at Koshee siding, Ont.

4418. Mar. 6.—Approving Ottawa Electric Ry. standard passenger tariff showing tolls to be charged within the city of Ottawa and between points therein and the boundary of the Experimental Farm; between the limits of Ottawa and Britannia-on-the-Bay; and between the city limits and Rockliffe rifle range.

4419. Mar. 12.—Bell Telephone Co. crossing over G.T. Ry. 1⅛ miles east of St. Catharines station, Ont.

4420. Mar. 6.—Authorizing Essex Terminal Ry. to join with its track the Lake Erie & Detroit River Ry. track at Walkerville, Ont.

4421. Mar. 6.—Authorizing Esquimalt & Nanaimo Ry. to construct a branch line from its present terminus on south side of Store St., Victoria, B.C., to its proposed additional terminal grounds on the north side of that street, viz., block D, formerly occupied by Albion Iron Works.

4422. Mar. 10.—Authorizing the G.T. Pacific Ry. to construct its railway across 32 highways from mileage 0 to 42.029, Alberta.

4423, 4424. Mar. 10.—Authorizing the G.T. Pacific Ry. to construct its railway across 63 highways, from mileage 42.029 to 112.942, Alberta.

4425. Mar. 10.—Authorizing the G.T. Pacific Ry. to carry its track over the Canadian Northern Ry. by an overhead bridge, in sec. 14, tp. 53, range 24, west of 4th meridian, Edmonton district, Alta.

4426. Mar. 10.—Approving deviation in location of C.P.R. Temiskaming branch, in Mattawa, Ont.

4427. Mar. 10.—Authorizing G.T. Ry. to take certain property for the purpose of moving from its present site and placing thereon its passenger station at St. Hubert, Que.

4428. Feb. 17.—Authorizing Brantford & Hamilton Electric Ry. to erect its power transmission lines over the G.T.R. track at Cainsville, Ont.

4429. Mar. 10.—Authorizing G.T. Pacific Ry. to connect its track with the Canadian Northern Ry.'s main line track in lots 25, 26 and 27, St. Charles parish, Man.

4430. Mar. 12.—Bell Telephone crossing G.T.R. at Jarvis St., ½ mile north of Orillia station, Ont.

4431. Mar. 10.—Authorizing the C.P.R. to use bridge 96.2 on its Sherbrooke section.

4432. Mar. 11.—Authorizing C.P.R. to construct bridge over the Little Key River and James Bay Ry., on its Toronto-Sudbury branch.

4433. Mar. 11.—Authorizing Guelph & Goderich Ry. to operate its trains on its track where it crosses the G.T.R. track, by an overhead crossing at Goderich, Ont.

4434, 4435. Mar. 11.—Authorizing Guelph & Goderich Ry. to operate its trains on its track where it crosses the G.T.R. tracks at Blyth and Milverton, Ont., by means of overhead crossings.

4436. Mar 10.—Approving location of Esquimalt & Nanaimo Ry. north of Wellington, B.C., from mileage 85.2 at Nanoose Bay, to mileage 87.5.

4437. Mar. 11.—Approving grade revision of C.P.R. main line between Hector and Field, B.C.

4438, 4439. Mar. 11.—Authorizing Bell Telephone Co. crossing over C.P.R. at Poplar

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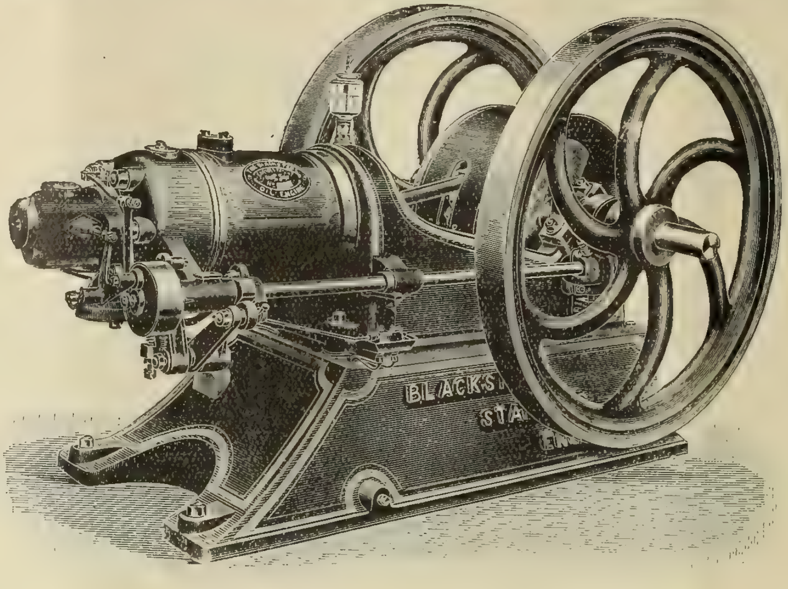

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4440. Mar. 11.—Authorizing C.P.R. to operate its trains on its track where it crosses the G.T.R. track, by an overhead bridge, at Tottenham, Ont.

4441. Mar. 12.—Approving Montreal Park & Island Ry. Co.'s by-law authorizing its Secretary to prepare and issue tariffs of tolls to be charged for all traffic carried.

4442. Mar. 12.—Approving location of G.T. Pacific Ry. stations in sec. 14, township 49, range 16, west of the 4th meridian, Alberta.

4443–4457. Mar. 12.—Approving location of G.T. Pacific Ry. station at 39 points in Manitoba, Saskatchewan and Alberta.

4458. Mar. 12.—Authorizing C.P.R. to construct spur line from its Snowshoe spur to the Granby Consolidated Mining & Smelting Co.'s premises, Yale district, B.C.

4459. Mar. 13.—Extending until the final disposition of the appeal of the G.T.R. to the Judicial Committee of the Privy Council from the Judgment of the Supreme Court of Canada, as regards the application of W. N. Robertson, of Toronto, Ont., in the penny fare case.

4460. Mar. 12.—Requiring that crossing of G.T.R. with Ottawa Electric Ry. Co. at Queen St., Ottawa, be protected by derails to be interlocked with gates. Trolley guard to be placed over the trolley wire.

4461. Mar. 11.—Approving Canadian Northern Ontario Ry. location through county of Hastings, from boundary line between counties of Hastings and Lennox, mileage 116 to 133, near Belleville, Ont., and from mileage 135, near Belleville, to the east boundary of Trenton, Ont., mileage 144.

4462. Mar. 13—Authorizing municipality of Notre Dame de Quebec to lay water pipes under C.P.R. tracks at St. Malo, near Quebec city.

4463. Mar. 11.—Authorizing Quebec, Montreal and Southern Ry. to construct bridge over diverted highway west of Nicolet River, Que.

4464. Mar. 14.—Authorizing G.T. Pacific Ry. to construct its railway across 50 highways from mileage 0 to 49.197, Saskatchewan.

4465. Mar. 11.—Authorizing G.T. Pacific Ry. to cross C.N.R. track by an overhead bridge in sec. 14, tp. 53, range 24, west of 4th meridian, district of Edmonton, Alta.

4466. Mar. 16.—Authorizing Windsor and Tecumseh Electric Ry. to cross G.T.R. track on Sandwich St., Walkerville, Ont., by an overhead bridge, apportioning the cost of construction of such bridge, sidewalks, etc., between the railways and the town of Walkerville.

4467. Mar. 16.—Approving location of G.T. Pacific Ry. stations at six points.

4468. Mar. 13.—Authorizing C.P.R. to construct spur to the Western Cartage Co.'s premises, Calgary, Alta.

4469. Mar. 13.—Authorizing C.P.R. to construct its line along the line in block 70, between Tenth and Eleventh avenues, Calgary, Alta.

4470, 4471. Mar. 13.—Authorizing C.N. Quebec Ry. to construct bridges over the Jordan River near St. Sophie station, and over the River Rouge near Montcalm station, Que.

4472. Mar. 13.—Authorizing C.P.R. to construct its railway across Hall St., Renfrew, Ont.

4473. Mar. 13.—Authorizing C.P.R. to construct a spur to the Jamieson Meat Co.'s premises, Renfrew, Ont.

4474. Mar. 16.—Authorizing British Columbia Telephone Co. to erect its wires across the Esquimalt and Nanaimo Ry. 755 ft. from the 7th mile post from Nanaimo, B.C.

4475. Mar. 16.—Authorizing C.P.R. to construct spur to the Onaping Lumber Co.'s premises, Moncrieff tp., Ont.

4476. Mar. 16.—Authorizing C.P.R. to construct a spur to the Algoma Custom Smelting Co.'s premises, Thessalon, Ont.

4477. Mar. 16.—Authorizing C.P.R. to construct its railway across road allowance between secs. 28 and 29, tp. 24, range 10, west of 5th meridian, Sask.

4478. Mar. 16.—Approving location of G.T. Pacific Ry. station on secs. 5 and 6, tp. 39, range 19, west 3rd meridian, Sask.

4479. Mar. 16.—Authorizing C.P.R. to construct a spur line to the H. W. McNeill Co.'s premises, sec. 32, tp. 24, range 10, west 5th meridian, Alta.

4480. Mar. 16.—Authorizing C.P.R. to carry its railway across 4th St. W., Calgary, Alta.

4481–4484. Mar. 16.—Approval of location of G.T. Pacific Ry. stations at five different points.

4485. Mar. 16.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to open for carriage of traffic the portion of its line from Windsor to Kingsville, Ont., 28 miles.

◆

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309,900	116,100+
Nov..	957,400	689,100	268,300	215,700+
Dec..	801,100	558,400	242,700	264,900+
Jan...	578,200	462,500	115,700	226,800+
	$5,886,100	$4,162,000	$1,724,100	$1,618,600+

Approximate earnings for Feb., $485,600, agains $333,200 for Feb., 1907.

◆

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7,010,177.40	4,439,902.25	2,570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
Dec.	6,418,576.38	4,341,386.80	2,077,189.58	188,404.76−
Jan..	4,498,560.80	3,874,569.02	623,991.78	75,664.17+
	$45,384,056.87	$30,329,042.50	$15,055,014.37	$79,179.94−

Approximate earnings for Feb., $4,016,000, against $4,219,000 for Feb., 1907.

Duluth, South Shore and Atlantic Ry.—Operating revenue for Jan., $199,206.89; expenses, $158,019.25; net revenue, $41,187.64; other income, $11,690.59; interest on bonds, $71,641.67; taxes, $15,500.00; other expenses, $6,365.15; against $226,499.81, operating revenue; $181,106.70, expenses; $45,393.11, net revenue; $5,050.21, other income; $71,641.67, interest on bonds; $15,000.00, taxes; $2,607.36, other expenses for Jan., 1907. Total operating revenue for seven months ended Jan. 31, $1,930,255.25; expenses, $1,435,853.25; net revenue, $494,402,00; other income $56,378.67; interest on bonds, $501,491.67; taxes, $113,991.86; other expenses, $72,545.20; against $1,882,272.44, total operating revenue; $1,260,377.41, expenses; $621,895.03, net revenue; $42.808.33, other income; $501,491.67, interest on bonds; $97.560.95, taxes; $35,423.04, other expenses for same period 1906-07. Approximate earnings for Feb., $187,927, against $214,240 for Feb., 1907.

Mineral Range Rd.—Operating revenue for Jan., $58,602,80; expenses, $52,392.99; net revenue, $6,209.81; other income, $55.19; interest on bonds, $6,946.67; taxes, $3,000.00; other expenses, $1,862.66; against $55,541.97, operating revenue; $54,062.25, expenses; $1,479.72, net revenue; $97.70, other income; $6.946.67, interest on bonds; $3,000.00, taxes; $2.449.34, other expenses, for Jan., 1907. Total operating revenue for seven months ended Jan, 31, $479,343.09; expenses, $388,145.04; net revenue, $91.198.05; other income, $2,978.02; interest on bonds, $48,626.67; taxes, $23,191.08; other expenses, $15,613.56; against $448,109.62, total operating revenue; $325,458.54, expenses; $122,651.08, net revenue; $2.191.21, other income; $48,626.67, interest on bonds; $21,049.97, taxes; $15,741,24, other expenses, for same period 1906-07. Approximate earnings for Feb., $55,776, against $53,805 for Feb., 1907.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Operating revenue for Jan., $761,539.89; expenses, $515,980.76; net revenue, $245,559.13; against $706,290.06, operating revenue; $568,114.88, expenses; $138,175.18, net revenue, for Jan., 1907. Total operating revenue for seven months ended Jan. 31, $7,535,418.54; expenses, $4,461,603.65; net revenue, $3,073,814.89; against, $7,506,826.71, total operating revenue; $3,993,748.40, expenses; $3,513,078.31, net revenue for same period, 1906-07. Approximate earnings for Feb., $653,123, against $627,554 for Feb., 1907.

◆

Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G.T.R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for Jan., as compared with Jan., 1907:

GRAND TRUNK RAILWAY.

	1908	1907
Earnings	$2,128,200	$2,517,000
Expenses	1,946,900	1,942,000
Net earnings	$ 181,300	$ 575,000

CANADA ATLANTIC RAILWAY.

Earnings	$ 123,100	$ 125,300
Expenses	140,600	143,800
Deficit	$ 17,500	$ 18,500

GRAND TRUNK WESTERN RAILWAY.

Earnings	$ 417,800	$ 450,200
Expenses	406,500	412,000
Net earnings	$ 11,300	$ 38,200

DETROIT, GRAND HAVEN & MILWAUKEE RY.

Earnings	$ 140,900	$ 148,100
Expenses	118,100	126,700
Net earnings	$ 22,800	$ 21,400

Approximate earnings for Feb., $2,399,435, against $2,741,838 for Feb., 1907.

◆

Recent Dominion Legislation.

The following additional acts respecting transportation interests, passed at the current session of the Dominion Parliament, have received the royal assent:

Alberta and Brazeau River Ry.—Act of incorporation.

Ashcroft, Barkerville and Fort George Ry.—Extending the time for construction.

Boundary, Kamloops and Caribou Central Ry.—Extending the time for construction.

British Yukon Ry.—Authorizing the construction of a branch line

Calgary and Fernie Ry.—Extending the time for construction.

Canadian Pacific Ry.—Amending the acts respecting the company.

Edmonton, Dunvegan and British Columbia Ry.—Extending the time for construction.

Goodwin Car Co.—Act with respect to the company's patent rights.

Kamloops and Yellow Head Pass Ry.—Extending the time for construction.

Lindsay, Bobcaygeon and Pontypool Ry.—Extending time for construction of an extension.

Macleod, Cardston and Montana Ry.—Extending the time for construction.

Niagara, Grand Island Bridge Co.—Extending the time for construction.

St. Clair and Erie Ship Canal Co.—Extending the time for construction.

South Ontario Pacific Ry.—Extending the time for construction.

◆

The Central Vermont Ry. was fined $1,000 in the U.S. District Court at New York, Mar. 17, on admitting having granted a rebate of $312 to the Woolson Spice Co., Toledo, Ohio, on a shipment of coffee.

The Canada Railway News Co. proposes to erect a tourist hotel in Rideout tp., Lake of Bays district, Ont., and to encourage this work the township council has passed a by-law fixing the assessment of the property at $5,000. The Ontario Legislature is being asked to pass an act confirming the by-law at the current session.

LIGHT

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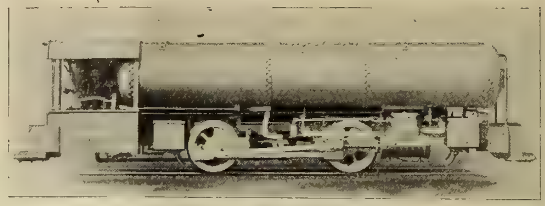

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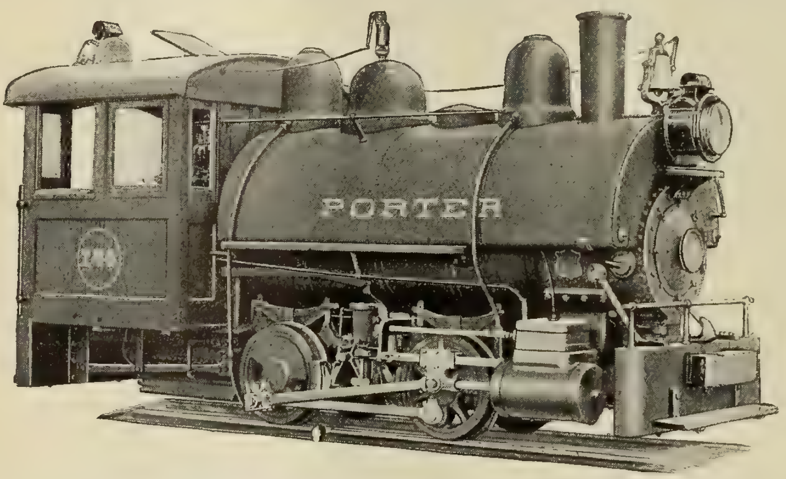

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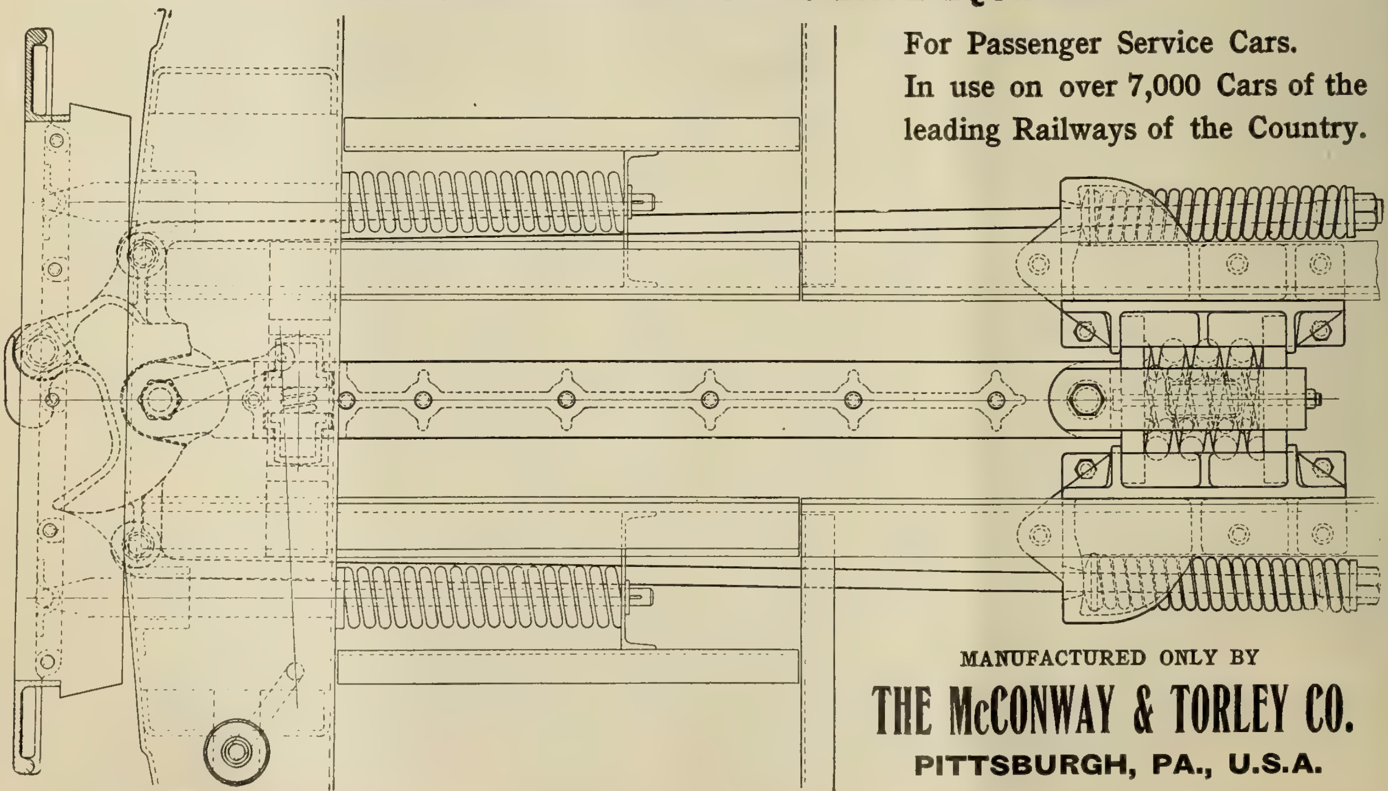

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The Quebec Bridge Disaster.

The report of the Commissioners—H. Holgate, C.E.; J. G. Kerry, C.E., and Professor J. Galbraith—appointed by the Dominion Government to investigate the collapse of the Quebec Bridge during construction on Aug. 29, 1907, was presented to Parliament Mar. 9. The report is an exhaustive one, with numerous appendices, but its conclusions are summed up in the following paragraphs:

The collapse of the bridge resulted from the failure of the lower chords in the anchor arm near the main pier. The failure of these chords was due to their defective design.

The stresses that caused the failure were not due to abnormal weather conditions nor accident, but were such as might be expected in the regular course of erection.

The design of the chords that failed was made by P. L. Szlapka, designing engineer of the Phœnix Bridge Co.

This design was examined and officially approved by Theodore Cooper, Consulting Engineer of the Quebec Bridge & Ry. Co.

The failure cannot be attributed directly to any cause other than errors in judgment on the part of these two engineers.

These errors of judgment cannot be attributed either to lack of common professional knowledge, to neglect of duty, or to a desire to economize. The ability of the two engineers was tried in one of the most difficult professional problems of the day, and proved to be insufficient for the task.

We do not consider that the specifications for the work were satisfactory or sufficient, the unit stresses in particular being higher than any established by past practice. The specifications were accepted without protest by all interested.

A grave error was made in assuming the dead load for the calculation at too low a value, and not afterwards revising this assumption. This error was of sufficient magnitude to have required the condemnation of the bridge even if the details of the lower chords had been of sufficient strength because, if the bridge had been completed as designed, the actual stresses would have been considerably greater than those permitted by the specifications. This erroneous assumption was made by Mr. Szlapka, and accepted by Mr. Cooper, and tended to hasten the disaster.

We do not believe that the fall of the bridge could have been prevented by any action that might have been taken after Aug. 27, 1907. Any effort to brace or take down the structure would have been impracticable, owing to the manifest risk of human life involved.

The loss of life on Aug. 29, 1907, might have been prevented by the exercise of better judgment on the part of those in responsible charge of the work for the Quebec Bridge & Ry. Co., and for the Phœnix Bridge Co.

The failure on the part of the Quebec Bridge & Ry. Co. to appoint an experienced bridge engineer to the position of Chief Engineer was a mistake. This resulted in a loose and inefficient supervision of all parts of the work on the part of the Quebec Bridge & Ry. Co.

The work done by the Phœnix Bridge Co. in making the detail drawings and in planning and carrying out the erection, and by the Phœnix Iron Co. in fabricating the material was good, and the steel used was of good quality. The serious defects were fundamental errors in design.

No one connected with the general designing fully appreciated the magnitude of the work, nor the insufficiency of the data upon which they were depending. The special experimental studies and investigations that were required to confirm the judgment of the designers were not made.

The professional knowledge of the present day concerning the action of steel columns under load is not sufficient to enable engineers to economically design such structures as the Quebec bridge. A bridge of the adopted span that will unquestionably be safe can be built, but in the present state of professional knowledge a considerably larger amount of metal would have to be used than might be required if our knowledge were more exact.

The professional record of Mr. Cooper was such that his selection for the authoritative position that he occupied was warranted, and the complete confidence that was placed in his judgment by the officials of the Dominion Government, the Quebec Bridge & Ry. Co., and the Phœnix Bridge Co. was deserved.

The instructions to the Commission were in general terms to investigate to the best of their ability the collapse of the bridge, and in carrying out these instructions they gave themselves very considerable latitude. They investigated everything to the most minute detail from the passing of the act of Parliament incorporating the Quebec Bridge Co. in 1887, and in doing so appear to have been given every facility and opportunity by the company, the Consulting Engineer, and the Phœnix Bridge Co. The report and its appendices bring out the facts that for the first 11 years of its existence the company practically accomplished nothing; that in 1900 the contract for the substructure was let, payment to be made partly by subsidies, and partly by the company's bonds, to be accepted at 60% of their face value, and that the contract for the superstructure was offered on similar terms. Tenders were asked for the superstructure in 1898, bridge building companies being asked to tender on their own designs to be drawn in accordance with certain specifications. These specifications had been prepared by E. A. Hoare, the company's Chief Engineer, of whom the Commissioners say that "from the standpoints of personal character and knowledge of Quebec and its people no better man could have been found, and the evidence throughout shows that to the best of his ability the company was faithfully served. There is, however, nothing in Mr. Hoare's record that would indicate that he had the technical knowledge to direct the work in all its branches." The tenders, the Commissioners point out, were "made from immature studies based upon insufficient data," and the report further states that "the procedure adopted in calling for tenders was not satisfactory in view of the magnitude of the work and was not calculated to produce the most efficient results." The bridge as originally designed, with its 1,600 ft. centre span, was certainly a work of great magnitude, but when it was decided in 1900 to increase the centre span to 1,800 ft.—or 100 ft. more than the two central spans of the Forth Bridge in Scotland—it was more than ever necessary that special care should have been exercised in the calculations and designs. The original specifications were the subject of consultation between Mr. Hoare, C. Schrieber, the then Deputy Minister of Railways, and the Departmental Bridge Engineer, and in July, 1903, at the time when the final plans were being completed, Mr. Schrieber suggested the appointment of an independent bridge engineer by the Department "to examine from time to time the detailed drawings of each part of the bridge as prepared and to approve or correct them as may seem necessary, submitting them for final acceptance to the Chief Engineer of the Department of Railways." This was objected to by the Consulting Engineer, as calculated to put him in the position of a subordinate, and an order-in-council was passed Aug. 15, 1903, which the Commissioners say "left the matter of the specifications entirely in the hands of Mr. Cooper, subject only to the approval of the Government authorities." The contract was let to the Phœnix Bridge Co., it being the lowest tenderer, and the Commissioners state that "there is no evidence whatever to indicate that economy at the expense of efficiency was ever considered by Mr. Cooper" in connection with the letting of the contract. Between 1900 and 1903 nothing apparently was done and the Commissioners add: "In the rush following the final financial arrangements of 1903 (i.e. the guaranteeing of the company's bonds by the Dominion Government), the necessity of revising the assumed weights was overlooked both by the engineers of the Phœnix Bridge Co. and by those of the Quebec Bridge Co., with the result that the bridge members would have been considerably overstressed after completion. This error was sufficient to have condemned the bridge, had it fallen from other causes."

In regard to the assumed weight the Commissioners state in another part of the report: "We are satisfied from the knowledge gained during the designing of the 1,800 ft. span that the 1,600 ft. span could not have been built with the weight of metal stated on the tender of Mar. 1, 1899." The financial weakness of the Quebec Bridge Co. seriously interfered with the carrying out of the undertaking. The company was "inefficient and not well organized, . . . in the absence of a fully competent engineer of erection, and of a forceful chief of staff for the inspection of shop work," and while the Phœnix Bridge Co.'s staff in general "was highly efficient," it did not provide an engineer to take charge of the erection who "by virtue of technical training and long experience on large bridge work, was fitted to take complete local control of the erection." The Commissioners consider Mr. Cooper the only man in the employ of the Quebec Bridge Co. capable of assuming the duties of Chief Engineer, and he was not authorized to act in that capacity, nor was he able, owing to ill-health, to visit the bridge site during the construction work.

P. Szlapka, designing engineer of the Phœnix Bridge Co., in an interview respecting the finding of the Commission on Mar. 12, said he criticized the design of the chord section that failed, calling the attention of Mr. Cooper, the Consulting Engineer, to its weakness, but that gentleman overruled him. All the plans were sent to Mr. Cooper and accepted or discarded by him before any work was gone on with by the Bridge Co. Even after the plans for the defective chords had been passed, Mr. Szlapka states that he returned them to Mr. Cooper with a criticism, and that Mr. Cooper again sent them back with the statement not to alter them, as they were all right.

Montreal Warehousing Co.—Following are the officers and directors for the current year: President, C. M. Hays; Vice-President, W. M. Ramsay; other directors: E. H. Fitzhugh, J. W. Loud, W. Wainwright; Manager and Secretary, G. H. Hanna. The annual meeting was held in Montreal Mar. 17. The company is a subsidiary of the G.T.R., and does not issue a printed report.

The English courts have refused a stay of proceedings in the action where a London money changer sued the Dominion Express Co. on some orders changed. The facts show that W. Upton stole a number of the company's order forms at Yorkton, Sask., which were changed by the London broker. The company refused payment and the decision given Mar. 21 is that the case will be heard in London, unless there is an appeal.

PINTSCH LIGHT

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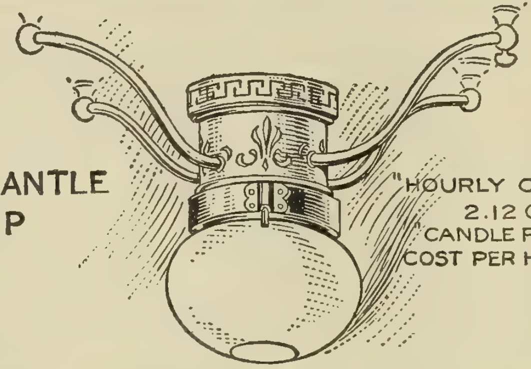

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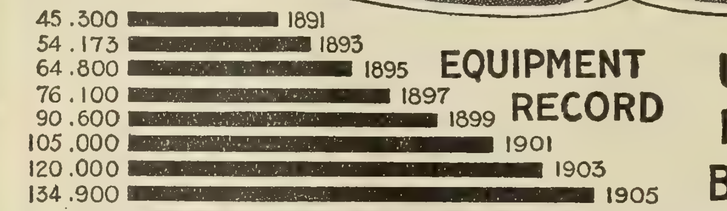

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MAINLY ABOUT PEOPLE.

E. Reino, Manager of the Finland Steamship Co., died at Montreal, Mar. 12.

F. S. Spence has been re-elected Chairman of the Toronto Harbor Commission.

H. R. Charlton, G.T.R. Advertising Agent, returned to Montreal from Great Britain Mar. 14.

A. MacKenzie has been appointed Dominion Coal Co.'s agent for the St. Lawrence district.

Mrs. Dickenson, wife of F. Dickenson, contractor, Hamilton, died there Mar. 14, after a short illness.

A. Kerr, formerly travelling passenger agent C.P.R., died at St. John, N.B., recently, aged 30.

F. Walton, for a number of years foreman carpenter G.T.R. shops, Point St. Charles, Montreal, died recently.

Sir Wm. Van Horne, Chairman of the Board, C.P.R., returned to Montreal early in March from a trip to Europe.

A. M. Nanton, Managing Director Alberta Railway and Irrigation Co., has returned to Winnipeg from Europe.

D. D. Mann, Vice-President Canadian Northern Ry., and party, returned to Toronto from Mexico, Mar. 9.

W. H. Stinson, G.T.R. station agent at Tillsonburg, Ont., has retired under the operation of the pension fund rules.

R. J. Mackenzie and the Misses Mackenzie left Toronto recently for California, where they purpose spending a short holiday.

M. H. McLeod, General Manager Canadian Northern Ry., returned to Winnipeg in the middle of March after a short trip to Cuba.

A. McDonald, who died at Detroit, Mich., Mar. 17, aged 89, was engaged in railway business at Hamilton, Ont., many years ago.

W. B. Howard, who died at St. John, N.B., recently, aged 65, was father of W. B. Howard, District Passenger Agent, C.P.R., at that port.

Hon. Jas. H. Howden, Minister of Railways in the Manitoba Government, was sworn in as Minister of Telephones also, Mar. 4.

H. C. Hammond, President Northern Navigation Co., returned to Toronto at the end of March, after spending several months in Europe.

Lady Shaughnessy returned from a visit to Great Britain, Mar. 1, Sir Thos. G. Shaughnessy going to St. John, N.B., to meet her.

H. D. Bayne, Montreal, Manager of the Canadian Westinghouse Co., sailed recently on a business trip to Great Britain, France and Egypt.

Lieut.-Col. the Hon. J. S. Hendrie, M.P.P. for Hamilton, has been re-elected chairman of the Railway Committee of the Ontario Legislature.

S. Harper, accountant at the Canadian Locomotive Works, Kingston, Ont., died suddenly at his boarding-house there, Mar. 21, aged 73.

K. W. Blackwell, President Montreal Steel Works, has been elected a director of the Intercolonial Coal Co., vice Lt.-Col. Henshaw, deceased.

Jno. Bonnick, who died in Winnipeg Mar. 15, was the driver of a stage on the Dawson trail, prior to the construction of the railway from Fort William to Winnipeg.

Col. F. Gourdeau, Deputy Minister of Marine, stated recently that he had requested to be relieved of his office. He has been in the public service over 40 years.

W. Cross, ex-Assistant to the Second Vice-President, C.P.R., returned to Winnipeg Mar. 21, after a three months' trip to Great Britain, including the Scilly Isles.

H. E. Kelly, formerly C.P.R. Chief Train Dispatcher at Toronto, who had been in ill-health for over a year, died in the general hospital at Chatham, Ont., Mar. 6.

Miss Crossen, daughter of W. J. Crossen, General Manager Crossen Car Mfg. Co., was one of the principal promoters of a charity ball held in Cobourg, Ont., Mar. 3.

Miss L. Peterson, daughter of P. A. Peterson, Chief Engineer Guelph and Goderich Ry., was married to Dr. D. Hingston, of Montreal, at Goderich, Ont., Mar. 3.

S. B. Morris, J.P., Canadian Pacific Ry. ticket agent at Rodney, Ont., has been elected Grand Master Workman of the Ancient Order of United Workmen of Ontario.

J. McCraw, formerly G.T.R. agent at Merritton, Ont., and latterly agent Central Vermont Ry. at St. Albans, Vt., is now General Agent of the C.V.R. at New London, Conn.

R. J. Mackenzie, Winnipeg, has decided to enter his horses at the various race meetings under his own name, and not as heretofore in the name of the Kirkfield stable.

Rev. A. H. Hoben, D.D., who has been appointed a professor in Chicago University, is a son of T. H. Hoben, Superintendent Canada Eastern Division, Intercolonial Ry., Gibson, N.B.

Allan Cameron, General Traffic Agent C.P.R., London, Eng., and Mrs. Cameron, spent some time in Montreal and Toronto recently, and sailed for home on the Empress of Ireland, Mar. 7.

T. Ahearn, city freight agent Intercolonial Ry., Montreal, was presented with a clock by the staff Feb. 25, on the occasion of his marriage, which took place on the following day.

John Moran, who died at Montreal, Mar. 3, was one of the oldest of the G.T.R. locomotive engineers. He was father of Mrs. Callaghan, wife of the Manager of the Hamilton rolling mills.

John Reynolds, who has been G.T.R. station agent at Brampton, Ont., since 1869, and has spent 54 years in the company's service, has been retired and placed on the pension list.

C. Shields, General Manager of the Consolidated Lake Superior Co., and previously of the Dominion Coal Co., who died at Sault Ste. Marie, Ont., Oct. 28, 1904, left an estate valued at $115,000.

E. H. Allen, who resigned his position as Intercolonial Ry. Claims Agent recently, to become Provincial Secretary of New Brunswick, was defeated in the recent general elections there.

P. Kennedy, who died in Montreal recently, aged 90, was father of M. J. Kennedy, of the Montreal Street Ry., and of D. Kennedy, of the Donaldson Line of Steamships, Montreal.

Jas. White, of Lyons and White, who have a 61-mile contract on the Transcontinental Ry. between the New Brunswick boundary and the Quebec bridge, died at his residence Ottawa, Feb. 29, aged 56.

W. Wainwright, Second Vice-President G.T. Pacific Ry., returned to Montreal, Mar. 14, from Victoria, B.C., where he had been in consultation with the Provincial Government on G.T. Pacific Ry. matters.

W. J. Erwin, a construction engineer on the G.T. Pacific Ry., died in the hospital at Edmonton, Alta., Mar. 19, aged 27. He was a son of J. Erwin, Renfrew, Ont., roadmaster Kingston and Pembroke Ry.

W. H. Breithaupt, President Berlin and Bridgeport Electric Ry., addressed the Toronto Engineering Club Mar. 5, on river regulation with reference to the Ontario Peninsula and of the Grand River.

E. A. Evans, C.E., General Manager Quebec Railway, Light and Power Co., and President Canadian Street Railway Association, sailed from New York Mar. 3, intending to return to Canada in April.

G. H. Wilkinson, C.P.R. train dispatcher, Toronto, was acquitted by a jury at Whitby, Ont., Mar. 3, of criminal negligence in connection with the fatal wreck of two freight trains at Myrtle, Ont., Mar. 25, 1907.

J. W. Nairn, locomotive engineer, Truro, N.S., and W. M. Thompson, conductor, Moncton, N.B., have been elected members of the Board of the Intercolonial Ry. Provident Fund for the year ending Mar. 31, 1909.

E. R. Bremner, who recently resigned his position as Division Freight Agent, G.T.R., Ottawa, has been appointed Canadian Manager of Watson and Todd, lumber shippers, Liverpool, Eng. Office, Citizens Building, Ottawa.

H. J. Pettypiece, C.P.R. ticket agent, Forest, Ont., and formerly M.P.P. for East Lambton, Ont., who was again nominated to contest the riding in the Liberal interest for the Ontario Legislature, has retired from the contest.

Graham Fraser, formerly General Manager Dominion Iron and Steel Co., and for years General Manager of the Nova Scotia Steel and Coal Co., has been elected a director of the Dominion Coal Co., succeeding Hon. D. MacKeen.

Jesse Wallis, who died at St. Thomas, Ont., Mar. 14, was for some years general car foreman at the Michigan Central Rd. car shops and was latterly identified with the project for the establishment of a car construction company there.

A. Gobeil was presented with an address, a purse of $1,000 and a silver service, by members of the Dominion Civil Service, at Ottawa, Mar. 12, upon his retirement from the Deputy Ministership of Public Works. Mr. Gobeil has been 36 years in the Government service.

T. Ahearn, C. J. Booth, E. J. Chamberlain, M. Davis, A. W. Fleck, S. N. Parent, W. Y. Soper, Ottawa, who are connected with transportation interests, are among the applicants at the current session of the Ontario Legislature for an act incorporating the Ottawa Hunt.

Capt. T. Taylor, formerly Commodore of the Hudson's Bay Co.'s fleet, died in the general hospital at Winnipeg, Mar. 15, aged 73. Prior to his retirement in 1903, he was in command of the schooner Otter, trading on Hudson and James Bays, and resided at Moose Factory, Ont.

The will of the late F. B. Polson, President of Polson Iron Works, Ltd., Toronto, disposes of an undivided half interest in Rosedale lands valued at $33,610; lands in Homer tp., Ont., furniture and effects, valued at $10,750. The interest in the Polson Co. has not yet been valued.

D. M. Burchell, formerly stores manager of the Dominion Coal Co., has been found not guilty upon two charges of embezzlement from the company by a jury at Sydney, N.S. There were sixteen other charges of a similar nature alleged, against which a nulle prosequi was entered.

A. J. Gorrie, formerly General Superintendent Canadian Northern Quebec Ry., and Mrs. Gorrie, have returned to Montreal from their trip to Great Britain. Mr. Gorrie has assumed his duties as Managing Director of the Geo. Hall Coal Co. of Canada, Ltd., with headquarters at Montreal.

Walter Cassels, K.C., who has been appointed Judge of the Exchequer Court of Canada in succession to the late Justice Burbidge, was born in Quebec, and educated

BALDWIN LOCOMOTIVE WORKS

The following locomotives are in stock and available for immediate delivery:—

FOR PASSENGER SERVICE:
One American type with cylinders 18″ x 24″, standard gauge.

FOR LOGGING SERVICE:
Two six-coupled double-ender locomotives with cylinders 15″ x 20″, standard gauge.

FOR SWITCHING SERVICE:
One four-coupled locomotive with cylinders 18″ x 24″, standard gauge.
One six-coupled locomotive with cylinders 18″ x 24″, standard gauge.
Two six-coupled locomotives with cylinders 21″ x 26″, standard gauge.

FOR FREIGHT SERVICE:
One ten-wheeled type with cylinders 18″ x 26″, standard gauge.
One ten-wheeled type with cylinders 18″ x 24″, standard gauge.
One consolidation type with cylinders 28″ x 32″, standard gauge.
Three consolidation type with cylinders 20″ x 24″, standard gauge.
One consolidation type with cylinders 19″ x 24″, standard gauge.

FOR SWITCHING AND CONTRACTORS' SERVICE:
Ten tank locomotives with cylinders 10″ x 16″, three feet gauge.
One six-coupled double-ender locomotive with cylinders 17″ x 20″, three feet gauge.

Full particulars and specifications of any of the above locomotives will be furnished on application.

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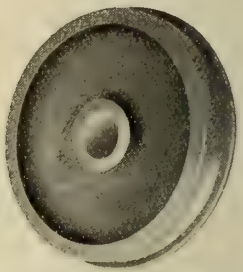

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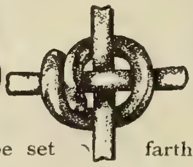

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at the Quebec High School and Toronto University, graduating B.A., 1865. He was called to the Ontario bar in 1869, and created a Q.C. in 1883.

W. Whyte, Second Vice-President C.P.R., accompanied by Mrs. Whyte; Sir Daniel McMillan, Lieutenant-Governor of Manitoba, and Lady McMillan, sailed from Boston, Mar. 14, on the S.S. Romanic for Naples, intending afterwards to visit France and Great Britain and to return to Winnipeg towards the end of May.

At the 24th annual gathering of the Royal Military College ex-Cadet Club, held at Ottawa, C. R. Coutlee, Halifax, N.S., the retiring president, occupied the chair. The officers for the current year include: Lieut. R. McColl, Halifax, Vice-President; and Capt. A. E. Doucet, Quebec, a member of the managing committee.

The Manitou Steamship Co., with headquarters at Chicago, Ill., having been taken over by the Northern Michigan Transportation Co., of which R. F. Church is General Freight and Passenger Agent, J. Berolzheim, heretofore Secretary and General Passenger Agent of the Manitou S.S. Co., has associated himself with the Horseshoe Cigar Co., 745 East 47th St. Chicago.

J. B. Hunter, who has been appointed Deputy Minister of Public Works for the Dominion in succession to A. Gobeil, retired, was born at Waterdown, Ont., in 1876, and entered the civil service in 1900, serving in the Privy Council, Interior, Postmaster-General's and Marine Departments before entering the Public Works Department under the late Hon. J. Sutherland.

D. R. McBain, who was recently appointed Assistant Superintendent New York Central Lines between Buffalo and New York, at Syracuse, N.Y., was at one time connected with the Michigan Central Rd., having been for some seven years Master Mechanic at the company's shops at St. Thomas, Ont., and latterly, Assistant Superintendent of Motive Power at Detroit.

G. W. Stephens, chairman of the Montreal Harbor Commissioners, met with a peculiar accident while inspecting harbor works at Glasgow, Scotland, Mar. 12. In company with a party, he was on board a small steamboat, travelling at a good rate of speed, when an unnoticed hawser stretched across the basin was run into, which swept the deck of passengers and gearing. Though not seriously injured, the party had a marvellous escape.

W. K. Evans, who has been appointed Commercial Agent, G.T.R., Cincinnati, Ohio, was born at London, Ont., and entered the G.T.R. service there in the freight department, where he remained until Feb., 1893, since which his service has been as follows: Mar., 1893, to Mar., 1896, through freight agent's office, G.T.R., Detroit, Mich.; April, 1896, to Dec., 1897, in freight claims department, G.T.R.; Jan. to Mar., 1898, general freight department, G.T.R., Montreal; April, 1898, to Feb., 1908, accountant, Grand Trunk Despatch, and Milwaukee and Michigan Fast Freight Lines, Detroit, Mich.

A. D. Huff, who has been appointed division freight agent G.T.R., Ottawa, was born at Chatham, Ont., July 17, 1866, and entered railway service 1884, since which his record has been: 1884 to 1886, spare operator and clerk with G.N.W. Telegraph Co., and G.T.R.; 1886 to 1893, in various capacities G.T.R. freight department, London, Ont.; 1893 to 1897, contracting freight agent, G.T.R., London; 1897 to 1902, Travelling Freight Agent, Middle Division G.T.R., at Hamilton, Ont.; July, 1902, to Jan., 1903, chief clerk to Division Freight Agent G.T.R., at Detroit, Mich.; Jan., 1903, to Mar., 1908, commercial agent G.T.R., Pittsburg, Pa.

H. T. Wilgress, who was recently appointed agent C.P.R. Pacific Steamship service, Kobe, Japan, was born at Lachine, Que., July 29, 1857, and entered C.P.R. service in 1886, since when his record has been: Oct., 1886, to Feb., 1887, Cashier Local Treasurer's office, Port Moody, B.C.; Feb., 1887, to May, 1899, Paymaster Pacific Division; May, 1899, to July, 1900, townsite and right-of-way agent Columbia and Western Ry. (C.P.R.), Greenwood, B.C.; July, 1900, to Jan., 1901, Cashier Local Treasurer's office, Vancouver, B.C.; Jan., 1901, to Aug. 1905, Chief Clerk General Agent's office, Portland and Asiatic Steamship Co., Hong Kong, China; Aug. 23, 1905, returned to C.P.R. service as Chief Clerk General Traffic Agent's office, Yokohama, Japan, which position he held to Jan. 1, 1908.

R. S. Richardson, who was recently appointed Assistant Superintendent, Canadian Northern Quebec Ry., Montreal, was born at Napanee, Ont., April 9, 1865, and entered railway service with the G.T.R. March, 1876, as messenger, remaining with that company until 1885, during which period he was successively porter, switchman, baggage master, freight clerk and telegraph operator. Taking service on the Bay of Quinte Ry. in 1885, he was to 1886 conductor; 1886 to 1893, express messenger and station agent; 1893 to 1894, freight and passenger conductor; 1894 to 1895, soliciting freight and passenger agent, B. of Q. Ry.; 1895 to 1896, brakesman, Canada Atlantic Ry.; 1896 to 1897, conductor; 1897 to 1901, general yardmaster, C.A. Ry., Ottawa; 1901 to Feb., 1908, general yardmaster and trainmaster, C.P.R., Smith's Falls.

J. R. Cameron, who was recently appointed General Superintendent Canadian Northern Ry. at Winnipeg, was born at Truro, N.S., Nov. 5, 1865, and entered railway service in 1882, since when he has been consecutively: May, 1882, to April, 1883, brakesman and baggageman, C.P.R., Winnipeg; April, 1883, to Mar., 1886, conductor, C.P.R., Winnipeg; April, 1886, to April, 1887, conductor Manitoba and North-Western Ry., Winnipeg; April, 1887, to Oct., 1898, conductor Northern Pacific Ry., in Montana; Oct., 1898, to June, 1901, Trainmaster Northern Pacific Ry., Grand Forks, with jurisdiction over that company's lines in Manitoba; June, 1901, to Aug., 1904, conductor Canadian Northern Ry., Winnipeg; Aug., 1904, to Dec., 1905, Superintendent C.N.R., Kamsack, Sask.; Dec., 1905, to Jan., 1908, Superintendent district 1, C.N.R., Port Arthur, Ont.

Allan Purvis, who was recently appointed Superintendent district 4, Central Division, C.P.R., with office at Souris, Man., was born at Batavia, Java, June 29, 1878, and educated at the Merchant Taylor's school, Liverpool, Eng. He entered railway service at 12 years of age, being successively: Aug., 1890, to Feb., 1891, messenger Stores Department; Feb. to Nov., 1891, storesman; Nov., 1891, to Sept., 1892, junior clerk at Vancouver, B.C.; Sept., 1892, to Aug., 1893, timekeeper, Donald, B.C.; Aug., 1893, to Oct., 1894, clerk, Vancouver, B.C.; Oct., 1894, to Mar., 1895, assistant storekeeper, North Bend and Kamloops, B.C.; Mar., 1895, to Sept., 1896, clerk and operator, Car Service and Fuel Department, Vancouver, B.C.; Sept., 1896, to Jan., 1899, chief clerk, Fuel Department, Vancouver, B.C.; Jan., 1899, to Feb., 1908, chief clerk to General Superintendent, Vancouver, B.C., all service with the C.P.R.

P. G. Flaherty, who was recently appointed Chief Dispatcher G.T.R., Montreal, was born in Newberry Co., Va., 1866, and entered railway service in 1881, since which he has been consecutively, 1881 to Dec., 1883, operator Allegheny Valley Rd., New Bethlehem, Pa.; 1883 to 1886, dispatcher Buffalo, Rochester and Pittsburg Ry., Buffalo, N.Y.; between 1886 and 1891 he was at different times dispatcher Union Pacific Ry., Evanston, Wyo.; and at different points in Mexico on the Mexican International and Mexican Central Rds.; 1891 to 1898, dispatcher Great Northern Rd., Kalispiel, Mont., and West Superior, Wis.; 1898 to 1899, dispatcher G.T.R., Battle Creek, Mich.; 1899 to 1901, dispatcher Great Northern Rd., West Superior, Wis.; 1901 to Feb., 1903, dispatcher G.T.R., Island Pond, Vt.; Feb. to Sept., 1903, dispatcher Pere Marquette Rd., Grand Rapids, Mich.; Sept., 1903, to Oct., 1905, dispatcher Great Northern Rd., White Fish, Mont.; Oct. to Dec., 1905, night chief train dispatcher Oregon Rd. and Nav. Co., Tekoa, Wash.; Jan., 1906, to Feb., 1908, Chief Dispatcher Great Northern Rd., Spokane, Wash.

F. A. Howe, General Agent G.T.R., Chicago, Ill., whose retirement under the pension rules was announced in our March issue, although in his 78th year, is hale and hearty. It is not generally known that he is one of the oldest marine men connected with the great inland water ways, having worked up from man in the forecastle to pilot, mate, captain and owner. As far back as 1849 he was sailing on the lakes between Chicago and Buffalo, and later on steamers owned by W. Read, of Erie, Pa., running between Chicago and Collingwood, Ont., in connection with the old Northern Ry. About 1854, in conjunction with A. T. Spencer, he purchased the steamer City of Superior, and in 1855 took her to Superior City, she being the second steamer on Lake Superior and the first to pass through the canal at Sault Ste. Marie. In the winter of 1859-60 the steamer Lady Elgin was purchased, and Mr. Howe and his partners started out from Chicago, Feb. 14, and tramped overland to Copper Harbor, where the steamer was laid up, in 24 days. At this time the Lady Elgin was the only steamer on the lake, owing to the canal being closed for the putting in of the upper lock gates. Mr. Howe retired from the marine service in July, 1860, and since then has been continuously engaged with the G.T.R. in connection with the lake and rail, and all rail traffic.

J. W. Leonard, whose appointment as General Manager C.P.R., Eastern Lines, in charge of matters relating to maintenance of way and operation, was announced in our Mar. issue, was born at Epsom, Ont., 1858. He entered railway service, 1872, since which his record has been: 1872 to Aug., 1877, telegraph operator and agent, Midland Ry. of Canada; Aug., 1877, to Dec., 1878, agent Victoria Ry.; Dec., 1878, to Mar., 1880, assistant manager, same road; Mar. to June, 1880, assistant to General Superintendent Credit Valley Ry.; June, 1880, to Nov., 1883, General Passenger Agent, same road; Nov., 1883, to May, 1884, Master of Transportation Ontario and Quebec Ry.; May, 1884, to Mar., 1887, Superintendent C.P.R. at Toronto; Mar., 1887, to Mar., 1890, Superintendent at Kamloops; Mar., 1890, to Mar., 1893, Superintendent lines east of Montreal, same road; Mar., 1893, to April, 1901, General Superintendent Ontario and Quebec division, same road, Toronto; April, 1901, to Mar., 1903, General Superintendent, Western Division, same road, Winnipeg; Mar. to April, 1903, General Superintendent, Central Division, same road, Winnipeg; April, 1903, to Jan., 1904, Assistant Manager, C.P.R. lines west of Lake Superior, Winnipeg. After some months spent in travelling, Mr. Leonard was elected President Guelph and Goderich Ry., and in Feb., 1905, was appointed Manager of Construction, C.P.R. lines in Ontario, and in Oct., 1905, Assistant General Manager, C.P.R. Eastern Lines, in charge of maintenance of way and operation, and also of the construction of new lines in Ontario,

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New country beyond Lake St. John, Quebec;
New mines at Mattawin and Atikokan, with furnaces at Port Arthur;
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Inquiries on these points to the Industries Dept., Head Office, C.N.R. Bldg., Toronto.

FISHERMAN AND HUNTER

There will be a Canadian Northern exhibit from six Provinces at the Sportsmen's Shows at Toronto (March 21-28) and at Montreal (April 4-11).

Four hundred miles in Nova Scotia. Six hundred in Quebec. Two hundred in Eastern Ontario. Three hundred between Lake Superior and Lake of the Woods. All three Prairie Provinces.

For Hunters and Fishermen who cannot attend the Shows there is plenty of information for the asking.

Prospective travellers' inquiries answered by any of the following:

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which combined positions he held until the appointment of J. G. Sullivan as Manager of Construction, C.P.R. Eastern Lines, Feb., 1907, leaving Mr. Leonard solely to the duties of Assistant General Manager Eastern Lines, in charge of maintenance of way and operation.

E. A. Evans, General Manager and Chief Engineer Quebec Ry., Light and Power Co., at Quebec, whose portrait appears on the first page of this issue, was born at Kensington, London, Eng., Feb. 26, 1855. Between 1875 and 1883 he was engaged as engineer on construction for the Cheshire Lines Committee (managing lines jointly owned by the Midland, Great Northern and Great Central Ry. companies), and the Lancashire and Yorkshire Ry. Co., and after a short stay in the U.S. came to Canada and was engaged in surveys on the projected Port Rowan and Lake Shore Ry., and the Pontiac, Pacific Jct. Ry., in 1884-5; served for nearly a year on the Geological Survey of Canada, since which his record has been: Mar., 1886, to Jan., 1889, engineer on Pontiac, Pacific Jct. Ry., Gatineau Valley Ry., and on surveys for St. Lawrence bridge at Quebec; June, 1889, engineer in charge of realignment and improvement of grades, ballasting and general completion of Quebec and Lake St. John Ry., from Whitehorse trestle to Roberval, 178 miles, and in charge of construction of branch line from Chambord Jct. to Chicoutimi; on the completion of this he was appointed engineer in charge of construction of Quebec city electric railway and General Manager on the opening of the line. This company has since developed into the Quebec Railway, Light and Power Co., which has built a suburban line along the north shore of the St. Lawrence River to Ste. Anne de Beaupre and Cap Tourment, and which also carries on a lighting and power business and has developed a magnificent water power at Montmorency Falls. Mr. Evans is a member of the Canadian Society of Civil Engineers; he was one of the founders of the Engineers' Club, Montreal, and took an active part in establishing the Canadian Street Railway Association, in which he has served successively as a member of the executive committee, as Vice-President, and this year as President.

The funeral of A. C. Killam, K.C., chairman of the Board of Railway Commissioners, who died at Ottawa somewhat suddenly, Mar. 1, from pneumonia, took place at Winnipeg Mar. 5. The late Chief Commissioner was born at Yarmouth, N.S., Sept. 18, 1849; graduated from Toronto University, and was called to the Ontario bar in 1877. He moved from Windsor, Ont., to Winnipeg in 1879, being called to the Manitoba bar the same year, and was made a Queen's Counsel in 1884. He represented South Winnipeg in the Manitoba Legislature until 1885, and is remembered there chiefly on account of his speech on the right of the province to grant railway charters without the Dominion having the power of disallowance. He was sworn in a Judge of the Court of Queen's Bench Feb. 19, 1885, and in April, 1899, became Chief Justice for the province on the retirement of Sir Thomas Taylor. In Aug., 1903, he was appointed a Justice of the Supreme Court of Canada, to fill the vacancy caused by the death of Justice Armour, being the first Western judge to be given a seat in that court. On the resignation of the late Hon. A. G. Blair, he was asked to become Chief Railway Commissioner, and took over the duties Feb. 6, 1905. The death of Mr. Killam will seriously cripple the work of the Commission, as there were a number of important cases awaiting judgment, notably the Bell Telephone's matter. He was also chairman of the arbitration committee, having in charge the adjustment of the disputes between the Intercolonial Ry. and the G.T.R. His premature death came as a shock to those with whom he has worked all over the country, as he was apparently a man of great physical strength, and was noted for the constant alertness he displayed in the work of the Commission. Railway men from one end of the country to the other feel a profound regret at his death, as they recognized in him a man who would not only give due attention to all that came before him, but who was eminently fair in his decisions.

Victoria Rolling Stock Co. of Ontario.

Following are extracts from the annual report for the year ended Feb. 15, 1908:

"During the year the company did not issue any new debentures, and outstanding debentures against leases were reduced by $379,000. The final payments under the following leases have matured and were duly met by the respective railway companies, and conveyances of the rolling stock included in the leases duly executed by this company: Leases April 1, July 15, and Sept. 15, 1897, to C.P.R. Co.; lease Aug. 2, 1897, to Minneapolis, St. Paul and Sault Ste. Marie Ry. Co. and C.P.R. Co.; lease Sept. 15, to International Ry. Co. of Maine and C.P.R. Co. All other payments maturing during the year have been promptly met. The directors wrote off discount and commission account $20,000, leaving $16,000 still to be dealt with. The profit on the year's business, after charging up directors' fees, expense account and the above amount ($20,000) for discount and commission on debentures sold, is $17,736.35, out of which a dividend of 12% per annum on the paid-up capital stock, amounting to $14,400, has been paid, leaving $3,336.35 carried forward to profit and loss account, which now stands at $117,718.59."

ASSETS.

Obligations on leases	$2,013,313.55
Debentures held by company and accrued interest	171,888.06
Discount and commission on series S. debentures	16,000.00
Cash in Bank	110,510.31
	$2,311,711.92

LIABILITIES.

Capital stock, subscribed	$ 600,000.00
" " paid up	120,000.00
Debentures outstanding	2,054,000.00
Interest accrued on same	19,993.33
Balance at credit of profit and loss acct.	117,718.59
	$2,311,711.92

PROFIT AND LOSS ACCOUNT.

Interest paid and accrued on debentures and advances	$ 93,023.99
Discount and commission on debentures sold, series S.	20,000.00
Expense account	1,094.88
Directors' fees last year	1,400.00
Dividend account	14,400.00
Balance carried forward	117,718.59
	$ 247,637.46
Balance at credit profit and loss account Feb. 15, 1907	$ 114,382.24
Rents received and accrued on leases and interest on debentures held by company	133,255.22
	$247,637.46

MEMORANDUM RE ROLLING STOCK.

Original cost of rolling stock held under existing leases	$4,439,802.53
Amount paid in on account by railway companies in addition to interest	2,385,515.37
	$2,054,287.16
Total amount of company's debentures outstanding	$2,054,000.00

The officers and directors for the current year, who were re-elected, are: President, E. B. Osler; Vice-President, W. D. Matthews; Managing Director, H. C. Hammond; other directors, D. Coulson, Hon. J. S. Hendrie, H. Pellatt, D. R. Wilkie.

National Transcontinental Railway.

The total estimated length of the main line from Moncton, N.B., to Winnipeg, is 1,804 miles, and we are officially advised that the surveyed mileage is the same, and that with the exception of some revision at a few points the whole of the line has been located. Contracts for construction½ have been let covering in all about 859 miles exclusive of the mileage for which tenders are now under consideration as referred to below. The mileage under contract is distributed as follows: New Brunswick, 119 miles; Quebec, 150 miles east and 195 miles west of the St. Lawrence River, and 78 miles easterly from the Ontario boundary; Ontario, 72 miles from the Quebec boundary westerly, and 158 miles from the Manitoba boundary easterly; Manitoba, 87 miles from Winnipeg easterly. The mileage of grading done on the various contracts let in the several provinces was, at the latest reports, approximately: New Brunswick, 16 miles; Quebec, east of the St. Lawrence River, 41 miles; Quebec, west of the St. Lawrence River, 101 miles; Western Ontario and Manitoba, 171 miles. Track has been laid in Quebec west of the St. Lawrence River on 34 miles, and in Manitoba easterly from Winnipeg, on 49 miles. The maximum gradients are 0.4% eastbound, and 0.6 westbound, except at two points; and the sharpest curvature is 6°. The bridges and trestle are being constructed to stand the test of two 180-ton consolidation locomotives followed by a load of 4,750 lbs. per lineal foot. The tunnels are being constructed 16 ft. wide and 23 ft. 9 in. high on tangents. The steel being laid is 80 lbs. to the yard.

Tenders are under consideration by the Commissioners of the Transcontinental Ry. for the construction of several sections of the Eastern Division as follows:

District A.—From about 58 miles west of Moncton, N.B., to the crossing of the Intercolonial Ry. at mileage 97.7, a distance of 39.7 miles. Only one tender has been received, namely, that of the G.T. Pacific Ry. Co.

From mileage 97.7 to the Tobique River, at about mileage 165.7, less one mile, about 67 miles. The tenders received were from the G.T. Pacific Ry. Co., and Macdonald & O'Brien.

From the Tobique River to about 3.5 miles west of Grand Falls, N.B., about 31.5 miles. Tenders have been received from the G.T. Pacific Ry. Co., Craig & Thompson, Macdonald & O'Brien, M. P. & J. T. Davis, Kennedy & McDonald, the Willard Kitchen Co.; Trites, McPhail, Mavor & Miller.

District B.—From the Quebec-New Brunswick boundary westerly for about 52.4 miles. Tenders have been received from the G.T. Pacific Ry., O'Brien & Fowler, M. P. & J. T. Davis.

District D.—From about eight miles west of the crossing of the Abitibi River, Ont., westerly for 100 miles. The tenders under consideration are from the G. T. Pacific Ry. Co., and E. F. & G. E. Fauquier.

District E.—From about 19.5 miles west of the crossing of Mud River, near Lake Nepigon, Ont., easterly for 75 miles. Tenders have been received from the G.T. Pacific Ry. Co., J. D. McArthur, E. F. & G. E. Fauquier, Chambers Bros., McQuigge & McCaffrey.

J. D. McArthur, contractor for the section of the line from Winnipeg easterly to Lake Superior Junction, Ont., 250 miles, was in Montreal Mar. 11. He said the firm had about 7,000 men at work all winter on the contract, and the weather had been such that not a single day had been lost. About 60% of the entire work had been done. While the first estimate of the cost of the 250 miles had been $13,000,000, so many changes had been made that the actual outlay would be well

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on to $16,000,000. The changes made had all been for the improvement of the line.

GRAND TRUNK PACIFIC RY.

Soundings have been taken in the Red River at Winnipeg with a view of deciding on the foundation for the bridge to connect with St. Boniface. Tracklaying on the line between Portage la Prairie and Saskatoon has been resumed, and will be pushed until the gap of 65 miles left, when work had to be suspended Feb. 10, has been closed. Ballasting was expected to commence by the end of March, and the surfacing gang was announced to have been engaged to start work April 1. West of Saskatoon the grading has been completed to the Battle River, and two of Foley Bros. & Larson's camps have been at work all winter on the grading. One camp is located just across Battle River and the other just east of Clover Bar, where the line crosses the North Saskatchewan River. Under favorable conditions it is expected to have the grading from the Battle River to Edmonton completed early in the spring. At the Battle River the work of building the bridge is going on satisfactorily. However, it is not thought that Gunn & Sons, who have the contract for the cement work, will have it done till May, and that by the time the steel is on it will be late in the fall. The bridge is quite a bit larger than the one across the South Saskatchewan at Saskatoon. On the line west of Edmonton, Alta., sub-contracts of 30 miles each are reported to have been let by Foley, Welsh & Stewart to J. McAllister, M. McKenzie, and B. Baker. The remaining section of 30 miles of the contract, it is said, will be let in one or two mile sections.

The British Columbia Legislature, Mar. 7, passed the act ratifying the agreement between the company and the Provincial Government with respect to the Prince Rupert townsite. Under the agreement the Province disposes of its reversionary rights to the 14,118 acres bought from the Indians of Metlakatla by the railway company at the rate of $2.50 an acre. One-quarter of the lots and blocks into which this land may be subdivided by the company is to be reconveyed to the Province, the chief commissioner to select one lot first, and the railway company three until the entire one-quarter is reconveyed. The Province pays one-quarter of the cost of the survey and subdivision. A free grant of a right-of-way not exceeding 100 ft. in width through from the coast to the eastern boundary of the Province is made to the company. Through the lands on Kaien Island and the Tsimpsean Reserve the right-of-way is to be but 60 ft. in width, and the plans must be approved by the Lieutenant-Governor-in-Council. The Province grants lands necessary for sidings, stations, etc., to the railway company, the area of such grants to be subject to the approval of the Lieutenant-Governor-in-Council. The railway company agrees to begin actual construction work by June 1, to purchase all material and supplies required, if the terms are similar to those upon which the said supplies may be obtained elsewhere within the Province. A fair wage clause is included in the Act. The railway is granted exemption from taxation until Dec. 31, 1921, according to the terms of the railway assessment act.

W. Wainwright, Second Vice-President G.T. Pacific Ry., stated Mar. 17, that tenders would shortly be asked for a further 200 miles of the mountain section of the line. A contract has been let to Foley, Welsh & Stewart, for the first 100 miles of the line from Prince Rupert easterly. (Mar., pg. 197).

Traffic on the Middleton and Victoria Beach line of the Halifax and Southwestern Ry. was reopened Mar. 9, after having been suspended for several weeks.

Railway Finance, Meetings, etc.

Buffalo and Lake Huron Ry.—The report of the directors for the half-year ended Dec. 31, 1907, sets forth that after providing for the interest on the first and second mortgage bonds the available balance will be £14,598 1s. 9d., which will enable the directors to pay the usual dividend of 5s. 3d. per share, and leave a balance of £813 8s. 6d. to be carried forward to the next account. Dividend warrants were posted Mar. 4. The company's line is leased to the G.T.R. for £70,000 a year, and the company also owns stock and bonds of the face value of £13,524 9s. 4d., which cost £8,122 7s. 2d. The stocks and bonds outstanding are: 52,513 ordinary shares of £10 each, £525,130; first mortgage 5½% bonds, £297,600; and second mortgage 5½% bonds, £466,158. The expenses, including rent of offices and directors' remuneration, amount to £544 17s. 3d. for the half-year.

Canadian Pacific Ry.—The directors recently sold on the London, Eng., market £2,000,000 of 4% debenture stock at over par, the price realized being very slightly lower than that realized by the Dominion Government for its recently floated loan.

Canadian Railways Finance Co.—The public inquiry into the formation and failure of this company, which was formed in London, Eng., for the purpose of financing the construction of the Hudson's Bay and Pacific Ry., has been closed. (June, 1907, pg. 407).

Consolidated Lake Superior Co.—Judgment has been handed out in the Chancery Court of New Jersey, to the effect that the right to vote upon $5,000,000 of shares hypothecated with Philadelphia bankers, rests with the bankers and not with the Canadian Improvement Co. The bankers desired to vote on the stock at the annual meeting called for Nov., 1907, but were restrained by an injunction and the meeting was adjourned until the question was settled.

The annual meeting has been adjourned from time to time, the last adjournment fixing Mar. 18 as the day.

Press reports state that the earnings of the company for the half-year ended Dec. 31, 1907, show $741,066 net, and that the interest and charges for the same period were $214,000, leaving a surplus of $526,000.

The annual meeting of the stockholders, which had been adjourned to Mar. 18, was further adjourned to April 6.

Crow's Nest Coal Co.—The report of the directors for 1907 shows net profits of $382,986.28, an increase of $31,195 over 1906. Adding to this the $353,592.42 at credit of profit and loss; and $324,420 premiums on new stock, made a total of $1,060,998.70, from which there had been paid four quarterly dividends of 2½%, $355,178.98; there had been transferred to reserve $324,420, leaving $381,399.72 at the credit of profit and loss. During the year the company spent on improvements $414,501 on the coal interests; $21,735.56 on the electric light company, and $57,581.82 on the Morrissey, Fernie and Michel Ry. Following are the officers and directors for the current year: President, G. G. S. Lindsey, Toronto; First-Vice-President, Hon. R. Jaffray, Toronto; Second Vice-President, Sir H. M. Pellatt, Toronto; Treasurer, E. R. Wood, Toronto; other directors, E. C. Whitney, H. B. McGiverin, Ottawa; Col. W. P. Clough, New York; J. P. Graves, Spokane, Wash.; E. Rogers, Toronto.

Delaware and Hudson Co.—An injunction has been obtained in the New York Courts restraining the company from paying the quarterly dividend of 2¼% due Mar. 16. It is contended by the interests obtaining the injunction that the dividend has not been earned.

Dominion Atlantic Ry.—The annual meeting for the election of directors and the transaction of other business was announced to be held in London, Eng., Mar. 27.

Duluth, Rainy Lake and Winnipeg Ry.—Gross earnings for 1907, $403,229; operating expenses, $255,232; net earnings, $147,997; against $336,878 gross; $200,616 operating expenses, and $136,262 net earnings for 1906. Under the interstate commerce commission accounting system, adopted by this company on August 1, 1907, $11,398 was charged in operating expenses to cover depreciation of equipment during the last five months of the year. The average main line mileage in operation during both 1906 and 1907 was 48 miles.

Grand Trunk Pacific Ry.—The subscription list for an issue of £2,000,000 of 4% mortgage bonds, at 94½, closed in London, Mar. 18. Press reports state that the public only took about £200,000 of the issue, leaving the underwriters to take up the remaining £1,800,000.

Grand Trunk Ry.—The issue of £1,000,000 4% guaranteed stock on the London, Eng., market has been over subscribed, at 92½.

Halifax and Southwestern Ry.—Questions in the Nova Scotia Legislature resulted in the following statement being made by the Government recently: The amounts advanced to the company on account of railway construction were as follows: Halifax to Barrington Passage, $2,795,376.23. Barrington Passage to Yarmouth, $675,000; Victoria Beach Ry., $400,000. Central Ry., $425,000. In respect to the Liverpool and Milton Ry. it was proposed to treat that road as a part of the main line from Halifax to Yarmouth. Caledonia branch, $299,700. The mileage of each of said railways was as follows: Halifax to Barrington Passage, 196.5 miles. Barrington Passage to Yarmouth, 502 miles. Victoria Beach Ry., 40 miles. Central Railway, 61.8 miles, Liverpool and Milton, 5.3 miles, Caledonia branch, 22.2 miles The following were the liabilities of the Province on account of said undertakings still unpaid: Halifax to Barrington Passage, $71,652.02, Liverpool and Milton Ry., $71,550.00. The amount of interest to be added to the principal of mortgage under chap. 11, acts of 1907, was $214,258.27. An agreement was made under the said act Dec. 27, 1906. The total amount of principal of said mortgage was $4,738,258.27. The amount of interest accrued to Sept. 30, 1907, which had been paid by the company, was $111,847.73. No interest paid by the company had been refunded.

Klondike Mines Ry.—Under the terms of a deed of mortgage dated July 29, 1905, the company has appointed Sir W. L. Young, Bart., London, Eng., as a trustee in room of J. Carlise, who has resigned. The other trustee under the deed is R. A. Lawther, of Lawther, Lutta & Co., shipowners, London.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—The directors announced Mar. 16, a dividend at the rate of 6% on the common stock. Heretofore the company has been paying a 4% dividend on its common stock.

Morrissey, Fernie and Michel Ry.—The annual meeting has been called to be held in Toronto, April 6. See also Crow's Nest Coal Co.

Nova Scotia Southern Ry.—Replying to questions in the Nova Scotia Legislature recently, the Premier said there were a number of unpaid claims due by this company for labor and materials for the construction of the line between Shelburne and New Germany—a large portion being for the construction of that portion now in operation as the Caledonia branch of the Halifax and Southwestern Ry. The Province was not under legal obligation to pay the claims, but he considered it equitable to protect the creditors against loss, and it was arranged that if the Halifax and Southwestern Ry. should buy out the rights of the N.S.S. Ry.,

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it could utilize whatever portion of the line found advisable, provided it paid all liabilities of the old company for work and material in connection with the actual construction of the railway. These claims were made a charge against the advances to the H. and S.W.R., and were deducted from such advances. As a portion of the line of the H. and S.W.R. covered a portion of the same ground as that of the N.S.S. Ry. the Government informed the H. and S.W.R. Co. that if a reasonable agreement was made it would be approved, but that all claims in connection with the road for labor and material over the whole line would have to be paid for whether the new line followed the exact location of the old one or not.

Quebec Central Ry.—Gross earnings for Jan., $68,782.16; expenditure, $56,653.06; net earnings, $12,129.10; against $54,784.16 gross earnings; $44,358.10 expenditure, and $10,426.06 net earnings for Jan., 1907.

Temiscouata Ry.—Payment of interest at the rate of 1½% has been made on the consolidated mortgage income bonds.

At a shareholders' meeting in London, Eng., Mar. 11, the proposal to transfer the head office to that city was criticized. During the course of his remarks, the Chairman said that the railway was now in a fair way to do better financially than formerly, as it was a means of approach to a valuable pulp area.

Traffic receipts for Jan., $3,922.23 from passengers, $11,894.02 from freight and stock, $827.66 from mails and sundries, $16,643.91 total, against $12,374.60 total for Jan., 1907.

Temiskaming and Northern Ontario Ry.—The annual statement for 1907 shows receipts as follows: Cash on hand Dec. 31, 1906, $152.81; Ontario treasurer, $2,429,329.15; accounts collectible, $5,660.02; ditto, operation, $134,863.37; townsite sales and mining bonuses, $25,000.00; deposits on contracts, $15,500.00; interest, $225.07; unclaimed wages, $442.60; miscellaneous, $6,767.19; total, $2,617,940.21; disbursements, total, $2,617,484.70; and cash on hand Dec. 31, 1907, $455.51.

Montreal press reports to the effect that F. W. Morse, Vice-President and General Manager G.T. Pacific Ry., and the Chairman of the T. and N. O. Ry. Commission, had arranged the terms for a lease of the Ontario Government railway to the G.T.P. Ry., is denied by Mr. Englehart, and by the Treasurer of Ontario. The Premier of Ontario subsequently stated that it was not the intention of the Government to give up control of the railway.

The Treasurer of Ontario, in his budget speech Mar. 20, stated that in all $2,837,000 had been advanced by the Treasury to the Commission towards the construction of this railway. The net earnings for the year had been more than sufficient to pay the interest on the sinking fund on the portion of the line in operation, as well as to pay interest on the Canadian loan of $3,000,000. During 1907, over 518,000 passengers had been carried, the number carried one mile being 16,333,000, not one of whom had been maimed or injured.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—See Victoria Terminal Ry. and Ferry Co.

Victoria Terminal Ry. and Ferry Co.—The Board of Railway Commissioners, it was announced, would be asked Mar. 30 to sanction an agreement selling the line of the V.T. Ry. and Ferry Co. to the Vancouver, Victoria and Eastern Ry. and Navigation Co. The line to be transferred consists of what is described as the third section of the undertaking, viz., the railway from the ferry landing at Port Guichon to Cloverdale, B.C., 18.38 miles, and a branch from near Mud Bay, now under construction, in a generally southeasterly direction to the International boundary line near Blaine, Wash. The transfer of this line, together with the previous transfer of the line of the Vancouver, Westminster and Yukon Ry. between New Westminster and Vancouver, consolidates the several Great Northern Ry. lines in the vicinity of Vancouver under the title of the Vancouver, Victoria and Eastern Ry. and Navigation Co. The G.N.R. Co.'s other line, the New Westminster Southern Ry., it is understood, is to be practically abandoned on the completion of the new line referred to as under construction to Blaine.

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C. P. R. Betterments, Construction, Etc.

Atlantic Division Shops.—Press reports state that the company has secured an option on an area of land at Aroostook Jct., on which it is proposed to erect machine shops. It is also reported that the shops now being operated at Woodstock, N.B., will be closed.

Guelph and Goderich Ry.—The work on the branch from Linwood to Listowel, Ont., is being proceeded with, and it is expected that the 3½ miles of track remaining to be laid will be completed at an early date.

St. Mary's and Western Ontario Ry.—A deputation from Arkona waited on the directors and engineers at St. Mary's, Feb. 25, with a view of securing the location of the line through that place. On Mar. 3, one of the company's engineering staff visited the Parkhill and Arkona district with a view of seeing if a practicable route could be obtained, and what advantages it would offer over that already surveyed. The surveys at present in progress between Exeter and Sarnia follow a route from Exeter to the Ausable River, about a mile north of the G.T.R. crossing of the river. From that point the line runs directly into Thedford and thence to Forest, along the north side of the G.T.R., the fence only separating the two lines. Reaching Forest the line leaves the G.T.R., and goes along the northern outskirts of the town near the flax mill, and thence to Blackwell. It is proposed to locate the station in Forest near the carpet factory.

Walkerton and Lucknow Ry.—The trestle bridge across the river at Walkerton, Ont., has been completed, but it is alleged that its construction is not in accordance with the plans agreed upon between the company and the town council. The latter body brought the matter before the Board of Railway Commissioners, and one of the Commissioners' engineers inspected the bridge Mar. 4, with the object of ascertaining if the bridge as erected was likely to cause an obstruction in the river. The grading of the entire line has been completed, with the exception of some small fills near the station. It is expected that the steel will be laid and the ballasting completed during April.

Manitoba and Northwestern Ry.—Preparations are being made for an early start at the work of completing the construction of the extension from Sheho to Lanigan, Sask. Ballasting of the recently completed line between Lanigan and Saskatoon will be started April 15. Lanigan is the point of junction with the Pheasant Hills branch from Kirkella, Man., and a train service is being operated between Winnipeg and Saskatoon by this route. Grading will be started at an early date on the projected line from Sheho to Prince Albert, Sask., but it is not expected that it will be finished this season. West of Saskatoon it is intended to push grading during the year as far as Battle river, at which point a bridge will have to be constructed to enable the line to effect a junction with the Wetaskiwin branch of the Calgary and Edmonton Ry., already in operation from Wetaskiwin to Hardisty, Alta.

The Alberta Irrigation Works.—J. S. Dennis, Superintendent of Irrigation, and B.C. Land Commissioner, Calgary, Alta., in an interview at Montreal recently, said the area of land within the irrigation belt was about 3,000,000 acres, of which about 450,000 acres had been sold for settlement purposes. The price of irrigated lands ran up to $25 an acre, and of non-irrigated lands from $8 to $15 an acre. There were at present east of Calgary 350 miles of irrigation canals, and it is expected that an additional 200 or 300 miles of canals will be cut this year. When the whole work is completed there will be about 3,000 miles of these irrigation canals.

Greenwood, B.C.—Trestle filling has been going on for some time on the line between Greenwood and Castlegar, B.C. There are seven trestles in all between these points to be filled in. At the cascade trestle about 400,000 cubic yards of material has already been put in, and it is expected that the work will be completed early in May. Some improvement is to be made in the gradients and curvature, and in connection with this the Mother Lode branch at Greenwood is to be partially reconstructed. C. S. Moss, Resident Engineer, was in Greenwood Mar. 3, and stated that the object of the revision was to cut out a couple of trestles and to reduce the gradient. Work would start early in April, and the new piece of line would be completed in a couple of months.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—T. Greene, Chief Engineer, is quoted as having stated that grading on the line from Brooten to Duluth, Minn., 187 miles, has been suspended indefinitely. Track was laid in 1907 from Brooten to the Mississippi River, 50 miles, and grading has been completed to Onamia, 89 miles from Brooten, thus leaving 137 miles of track to be laid and 98 miles of grading to be completed. Foley Brothers, Larson & Co., of St. Paul, are contractors for the grading and Roberts Brothers of Chicago are contractors for the tracklaying. He also stated that there was no foundation for the recent press reports that the company intended to extend its lines to Spokane, Wash.

Lines in Washington Territory.—A press report from Seattle, Wash., says: "Definite announcement of the purpose of the C.P.R. to construct a railroad from Vancouver to Seattle is expected to be issued from the headquarters of the company at Montreal in a few days," and press reports from Spokane, state that it is reported there that "the right-of-way of the North Coast Ry has been acquired by the C.P.R., and that the formal transfer will be made in a few days, when the plans will be disclosed. The purpose is to operate it in connection with the Spokane International Rd., which is used by the C.P.R. from the International boundary to Spokane." D. C. Corbin, President of the Spokane International Rd., is quoted as having stated that he had not heard anything official of the proposed acquisition, and we are advised by C.P.R. officers that there is no truth in the reports that the C.P.R. had secured the right-of-way of the North Coast Ry., and that it was intended to construct a line from the company's Crow's Nest Pass line to Eastport, Idaho, in connection with the project. (Mar., pg. 197.)

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During Jan., 29 railway employes were killed and 26 injured in Canada. Of the fatalities, 9 were due to explosions, 5 to being run over, 4 to collisions, 3 to being struck by cars, 2 each to derailments, caught between cars, fires, and 1 each to falls, and falling materials.

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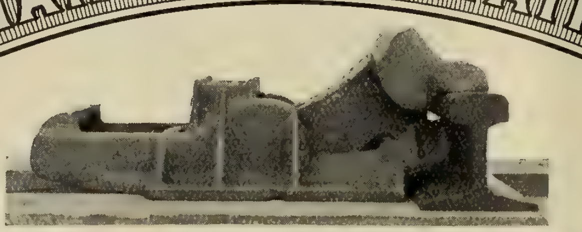

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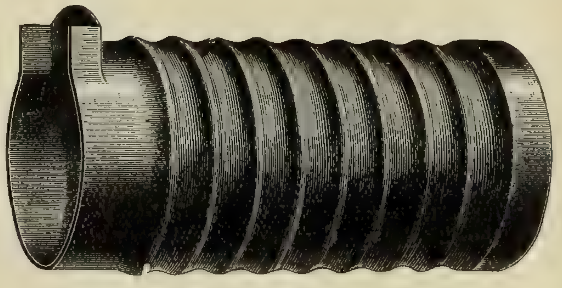

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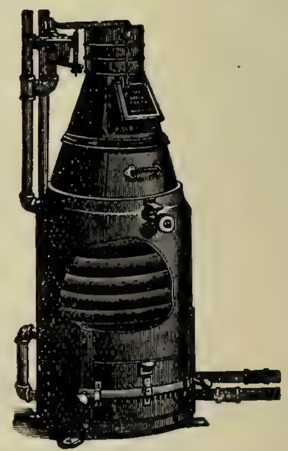

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Montreal Locomotive Works, Ltd., Montreal	234
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National Malleable Castings Co., Cleveland, O.	Cover 1
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O'Connor, J. J., Port Arthur, Ont	294
Ontario Wind Engine and Pump Co., Toronto.	288
Orford Copper Co., New York	270
Owen Sound Wire Fence Co., Ltd., Owen Sound.	294
Page Wire Fence Co., Ltd., Walkerville, Ont	258
Phillips, Eugene F., Electrical Works, Ltd.	288
Piper, The Hiram L., Co., Ltd., Montreal	302
Piper, N. L., Railway Supply Co., Ltd., Toronto.	276
Polson Iron Works, Ltd., Toronto	240
Porter, H. K., Co., Pittsburgh, Pa	254
Positive Lock Washer Co., Newark, N.J	302
Preston Car & Coach Co., Ltd., Preston, Ont	298
Prowse, G. R., Montreal	—
Pyke, J. W., & Co., Montreal	258
Pyle National Electric Headlight Co., Chicago.	246
Rail Joint Co., of Canada, Ltd.	Cover 1 and 250
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Standard Coupler Co., New York City	Cover 1
Standard Explosives, Limited, Montreal	264
Standard Steel Works, Philadelphia, Pa	258
Steel Concrete Co., Ltd., Montreal	272
Submarine Signal Co., Boston, Mass	286
Taylor & Arnold, Montreal	292
Toronto Bolt and Forging Co., Ltd., Toronto	280
Toronto Pressed Steel Co., Ltd., Toronto	276
Valentine & Sons Publishing Co., Montreal	252
Vulcan Iron Works, Wilkes-Barre, Pa	300
Washburn Steel Castings & Coupler Co., The.	274
Wire & Cable Co., Montreal	Cover 1
Wolfe Brush Co., Pittsburg, Pa	296
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Wages on Public Works and Railway Construction.—Two bills are under consideration at the current session of the Dominion Parliament affecting the payment of wages. The first proposes to establish an eight-hour day on all classes of public works, and for the voiding of all contracts in which the provisions of the act are not complied with. The second provides for an amendment of the Railway Act, chap. 37, Revised Statutes, sec. 259, by the addition of words bringing "all workmen, day laborers or other persons employed by the said company in the operation of the railway," within its operation, and providing further that no part of the wages earned shall be retained by the company for any reason, and that wages shall be paid at intervals of not more than two weeks.

The Imperial Privy Council has granted special leave for an appeal to be taken by the G.T.R. Co. in what is known as the penny fares case.

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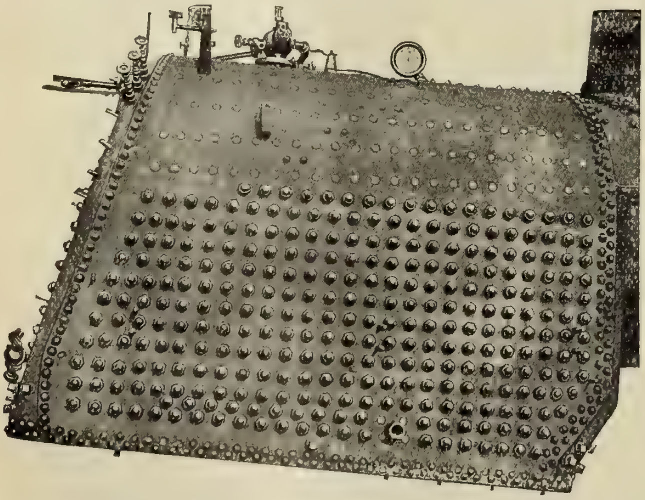

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Railway Rolling Stock Notes.

The Reid Newfoundland Co. is reported to have ordered two locomotives for its railway.

The Canada Car Co., Montreal, has received an order from the Hart-Otis Car Co., Montreal, for 20 ballast cars and one spreader car.

The Intercolonial Ry. between Feb. 14 and Mar. 14 ordered fifty 30-ton box cars from the Crossen Car Mfg. Co., Ltd., Cobourg, Ont.

The Canada Foundry Co., Toronto, between Feb. 14 and Mar. 14, delivered 9 consolidation locomotives to the Canadian Northern Ry.

The Canadian Locomotive Co., Kingston, Ont., between Feb. 15 and Mar. 14, delivered seven consolidation locomotives to the Intercolonial Ry.

The G.T.R. between Jan. 11 and Mar. 7 received the following additions to rolling stock: 8 caboose cars, 3 first-class coaches, 4 steel tank cars.

The Crossen Car Mfg. Co, Cobourg, Ont., during March, shipped a number of box cars to the Intercolonial Ry., on the order for 400 recently placed.

The Montreal Locomotive Works has ready for delivery fourteen 97½ ton Canadian Northern Ry. locomotives, and has delivered two 114-ton locomotives to the Intercolonial Ry.

The Dominion Coal Co. has added to its equipment one locomotive for the Sydney and Louisburg Ry., and one switching locomotive and a steam shovel for the banking station.

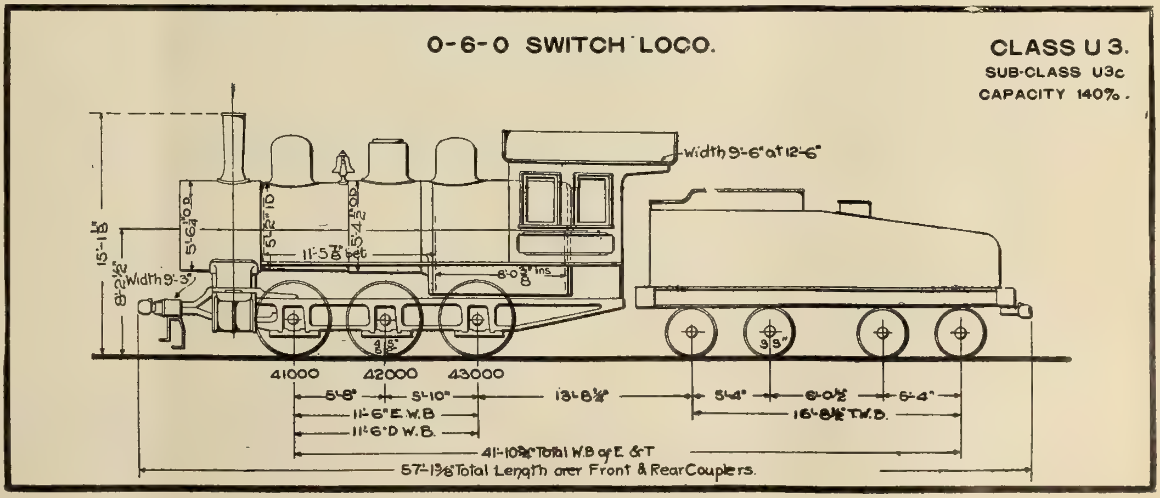
The C.P.R. between Feb. 17 and Mar. 19 placed the following orders for rolling stock: 1 colonist car, 1 baggage and express car, 1 baggage and mail car, and 3 ballast trimmers, at its Angus, Montreal, shops.

The Dominion Car and Foundry Co., Montreal, during Jan. and Feb., delivered 7 freight car underframes to the Montreal St. Ry.; 196 30-ton box car underframes to the Quebec, Montreal and Southern Ry.; 184 50-ton Otis type dump cars, and 54 steel ore cars to the C.P.R.

A press report states that the first of the G.T. Pacific Ry.'s private cars was out for a trial run recently. It has been built at the G.T.R. Point St. Charles shops, Montreal, for F. W. Morse, Vice-President and General Manager G.T. Pacific Ry., and has been named "Transcontinental."

The C.P.R. between Feb. 17 and Mar. 19 received the following additions to rolling stock: 11 first-class cars, 104 stock cars, 55 box cars, 95 flat cars, 5 colonist cars, 3 locomotives, Pacific type, from its Angus, Montreal, shops; and 79 steel coal cars and 54 steel ore cars from the Dominion Car and Foundry Co., Montreal.

A daily press report refers to the C.P.R. Angus shops at Montreal as having been partially shut down for some time past. We are officially advised that this is incorrect. The passenger car construction and repair shops have been working throughout the winter at their full capacity, and while there has been a slight decrease in the rate of locomotive building the locomotive repair shop has been exceedingly busy. There has been a slight reduction in the number of freight cars turned out, but there has been no shut down in this department.



CANADIAN PACIFIC RAILWAY SWITCHING LOCOMOTIVE.

The Inverness Ry. and Coal Co. has ordered from Rhodes, Curry & Co., Amherst, N.S., 50 twin hopper cars, 30 tons capacity. Following are chief dimensions, etc.:

Length over end sill	30 ft. 6 ins.
Width over side sill	7 ft. 9 ins.
Height from rail to top of body	9 ft. 11 ins.
Trucks	swing beam.
Brake beams	wood.
Air brakes	Westinghouse.

The Montreal Locomotive Works is building for the M.P. & J. T. Davis Co. two locomotives. Following are the chief details:

Cylinders	15 by 24
Driving wheels	44 ins.
Boiler	49 ins. diam.
Boiler pressure	160 lbs.
Firebox	72 ins. long by 33½ ins. wide.
Weight, in working order	76,000 lbs.
Maximum tractive power	16,700 lbs.
Capacity—water	1,125 gals.
“ coal	1 ton.

The Intercolonial Ry., between Feb. 20 and Mar. 21, received the following additions to rolling stock: 219 box cars, 80,000 lbs. capacity; 93 platform cars, 80,000 lbs. capacity, and 17 refrigerator cars, 60,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; 109 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.; 25 stock cars, 60,000 lbs. capacity, from the Canada Car Co., Montreal; and a further 30 platform cars, 80,000 lbs. capacity; and nine consolidation locomotives, from the Canadian Locomotive Co., Kingston, Ont.

Following are details of the C.P.R. pile driver noted in our March issue:

Wheel base of car	36 ft. 4 ins.
“ “ truck	5 ft. 3 ins.
Distance at either side from centre at which a pile can be driven	17 ft. 2 ins.
Distance in front of leading wheels, etc.,	16 ft. 7 ins.
Trucks	steel.
Body	wood.
Journal bearings	4¼ x 8 ins.
Height of leaders, rail to cross-piece on top,	42 ft.
Hoisting engine	double cylinder.
No. of rope drums	2
Width of car over sills	9 ft. 10 ins.
Length “ “	45 ft.
Wheels	six 33 ins. diam., cast iron, and two 34 ins. diam., steel tyred.
Height from rail to top of car body	4 ft. 0⅛ ins.

Following are general dimensions and particulars of the two switching engines, which the C.P.R. is building at its Angus, Montreal, shops for delivery in June, and which have already been noted in our columns. A diagram of these locomotives is given on this page.

Weight on drivers	126,000 lbs.
Total weight	126,000 lbs.
Diam. of cylinders	18 ins.
Stroke of pistons	26 ins.
Diam. of drivers	52 ins.
Type of boiler	radial stayed, wagon top.
Working pressure	200 lbs.
Heating surface, flues	1,406 sq ft.
“ “ firebox	138 sq. ft.
Tubes, number	234.
“ outside diam	2 ins.
Tubes, length	11 ft. 6 ins.
Firebox, length	8 ft. 0⅜ ins.
“ width	3 ft 7 ins.
Grate area	29 sq. ft.
Tank capacity	3,50 imp. gals.
Coal capacity	6 tons.
Air brakes	Westinghouse.
Brake beams	Simplex.
Couplers	Tower.

Following are the chief dimensions and special equipment of various rolling stock ordered by the C.P.R., and already noted in our Feb. and Mar. issues:

	Over frame.
1 sleeping car	72 ft. 2 ins. by 9 ft. 10½ ins.
2 tourist cars	72 ft. by 9 ft. 10½ ins.
2 first-class cars, with smoking room	72 ft. by 9 ft. 10½ ins.
1 colonist car	67 ft. by 9 ft. 10½ ins.
1 baggage car	60 ft. by 9 ft. 10½ ins.
2 mail and express cars	60 ft. by 9 ft. 10½ ins.
6 mail cars	60 ft. by 9 ft. 10½ ins.
3 baggage and smoking cars	65 ft. by 9 ft. 10½ ins.
Special Equipment:	
Axles	5 x 9 ins., M.C.B.
Bolsters	double.
Brake beams	Simplex.
Air brakes	Westinghouse.
Couplers	Tower, passenger.
Heating	Gold system.
Journal boxes	McCord.
Lighting	Pintsch gas.
Platforms	Standard Coupler Co.
Wheels	36¼ ins., steel tyred.

	Over frame.
84 box cars	36 ft. 8 ins. by 9 ft. 0⅝ ins.
4 freight refrigerators	41 ft. by 9 ft. 1⅝ ins.
22 30-ton stock cars	36 ft. 8 ins. by 9 ft. 5 ins.
162 30-ton flat cars	3 ft. 8 ins. by 8 ft. 10 ins.
2 Hart convertible cars	36 ft. 8 ins. by 8 ft. 10 ins.
12 vans	29 ft. by 9 ft.
Special Equipment:	
Axles	4¼ x 8 ins., M.C.B.
“ for refrig. cars and Hart cars,	5 x 9 ins. M.C.B.
Bolsters and brake beams	Simplex.
Sidebearings	Susemihl.
Brakes	Westinghouse.
Couplers	Tower.
Journal boxes	McCord.
Wheels	33 ins. cast iron.

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Dominion Railways and Canals.

The Minister of Railways and Canals in speaking in the House of Commons Mar. 3, detailing the work of his Department for the year, said the canal systems of Canada had cost the country about $120,000,000. The traffic on the St. Lawrence canals was not so large as had been hoped, while that on the Sault Ste. Marie canal had reached 12,000,000 tons, or two-thirds of the capacity of the canal. Of the total cost of the canals there had been expended upon the Welland canal about $31,000,000, including the cost of the 800,000 bush. elevator at Port Colborne, which would be ready for use this season. He was not yet decided as to whether it would be better for the Government to control the elevator absolutely or to lease it to private parties. Up to the present it had to be admitted that Government management of elevators had not been successful. The enlargement of the Welland canal had been proposed, and one

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authority had figured it out that grain could be carried, if the canal were deepened to 21 ft., from Fort William to Montreal, with only one transhipment at Kingston or Brockville, at 3 2-8 cents a bush., or an advantage of ⅛ cent below the cost on the deepened Erie canal route. If that advantage could be gained the proposal to deepen the canal would be worth talking about. After pointing out that in connection with the construction of the Trent Valley canal the Government was endeavoring as far as possible to develop the water powers as the work progressed; touching on the progress of work on the new transcontinental railway, and declaring that the Government policy with regard to the rebuilding of the Quebec Bridge would be declared at a later date, the Minister proceeded to deal with the Intercolonial Ry. For the financial year ended Mar. 31, 1907, a period of nine months, the receipts were: Passenger earnings, $1,952,438; freight earnings, $4,032,745; mail and express, $235,039; miscellaneous, $28,087; total, $6,248,311; and the expenditures were: Maintenance of way and structures, $1,111,888; maintenance of equipment, $1,180,521; conducting transportation, $3,485,224; general expenses, $147,537; rental of leased lines, $105,000; total, $6,030,171; leaving net earnings of $218,139. For the 12 months ended June 30, 1907, the receipts were $8,599,119, and the expenses $8,202,064, leaving net earnings of $397,054; while for the nine months ended Dec. 31, 1907, the receipts were $7,169,469, and the expenditures $6,790,444, leaving net earnings of $379,024. It was not expected that when the accounts of the last quarter were made up to Mar. 31, that the net earnings would be so large as at the end of Dec. With regard to betterments it was the policy of the Department to take from revenue $25,000 a month and credit it to what might be called the betterment fund, and it was hoped shortly to have transferred an amount sufficient to pay all that was required in that regard. The Intercolonial Ry. had 8,291 employes, of whom 63% were members of unions.

Referring to the future the Minister said the question of the management of the line by a Commission had been suggested. The question was open to discussion, but he was personally of opinion that the commission to manage the Intercolonial should be limited to one. The eastern terminus of the new transcontinental railway would be at Moncton, and the traffic it brought must be got to the seaboard. It might, therefore, be necessary, if the Intercolonial was to take charge of the transcontinental business, to construct a second track from Moncton to Halifax, and to make arrangements for a better service from Moncton to Western points. At present, he believed, they had fulfilled all the conditions of Confederation, and if a second track had to be constructed he would endeavor to get a straighter route, around the Cobequid mountains, to Halifax, and to have a lower gradient. As to the acquisition of local railways for branches of the Intercolonial Ry., if he came across a branch line anywhere, the acquisition of which would tend to contribute to the I.C.R. traffic, he would not hesitate to acquire it upon the favorable report of the Departmental officials. He had in his possession a report which would indicate that there were such branch lines.

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A recent press report stated that F. H McGuigan, formerly Fourth Vice-President G.T.R., had been appointed arbitrator in some proceedings in which the C.P.R. and the New York Central and Hudson River Rd. were interested. We are advised that the C.P.R. management has no knowledge of any such arbitration.

TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Canadian Northern Express and Telegraph Companies.—Scott Griffin, heretofore Superintendent of territory west of Port Arthur, with headquarters at Winnipeg, has been appointed Manager of these companies. Office, Toronto.

W. C. Muir, heretofore Superintendent territory east of Port Arthur, Ont., with headquarters at Toronto, has been appointed Superintendent of territory west of Port Arthur, Ont., vice Scott Griffin, promoted. We are advised that the auditing of express and telegraph accounts for the territory west of Port Arthur, which has been performed by the Canadian Northern Ry. Auditor at Winnipeg since Mr. Muir, who was formerly Auditor of the Express Co. at Winnipeg, was transferred to Toronto, will be again placed under his charge.

Canadian Northern Ry.—A. E. Warren, heretofore chief clerk to General Manager, has been appointed Superintendent District 2. Office, Winnipeg.

Canadian Northern Quebec Ry.—Consequent on the Quebec and Lake St. John Ry. having passed under Mackenzie, Mann & Co.'s control, the operating and accounting departments of the Canadian Northern Quebec Ry. and the Quebec and Lake St. John Ry. are being amalgamated by D. B. Hanna, who is President of both companies.

F. M. Spaidal, General Superintendent C.N.Q.R., with headquarters at Montreal, is to be transferred to Quebec and will also be General Superintendent of the Q. & L. St. J.

G. Tombs, General Freight and Passenger Agent C.N.Q.R., with headquarters at Montreal, will also be G.F. & P.A. of the Q. & L. St. J. R., his office remaining at Montreal.

W. A. Kingsland, Auditor C.N.Q.R., with headquarters at Quebec, has also been appointed Auditor Q. & L. St. J.R., his office remaining at Quebec.

A. E. Doucet, Chief Engineer Q. & L. St. J.R., has resigned.

S. S. Oliver, heretofore Auditor Q. & L. St. J. R., has been appointed Engineer of Maintenance C.N.Q.R. and Q. & L. St. J.R. Office, Quebec.

J. J. Sunderland, Acting Superintendent Q. & L. St. J.R., with headquarters at Quebec, will be Superintendent of that line.

The Treasury Department of the Q.&L. St. J.R. is being removed from Quebec to the C.N.R. offices, Toronto.

J. J. Derouin, Car Service Agent Q.&L. St. J.R., has also been appointed Car Service Agent C.N.Q.R. Office, Quebec, Que.

Canadian Pacific Ry.—A. Fortin, heretofore locomotive foreman at Ottawa, has been appointed locomotive foreman at Quebec, succeeding F. Nowell, transferred to Ottawa.

T. Milne, heretofore locomotive foreman at London, Ont., has been appointed locomotive foreman at Windsor, Ont., succeeding W. H. Kirkby, transferred to London, Ont.

W. H. Curle, heretofore of the firm of Scott and Curle, solicitors, Ottawa, has been appointed one of the assistant solicitors of the C.P.R. at Winnipeg. He has withdrawn from private practice and will devote his entire time to the C.P.R. interests, as assistant to J. A. M. Aikins, the company's solicitor at Winnipeg.

W. C. Bowles, heretofore General Freight Agent, Kootenay District, Nelson, B.C., has been appointed General Freight Agent, Central Division, succeeding W. B. Lanigan, promoted. Office, Winnipeg.

W. Bryce has been appointed locomotive foreman at Minnedosa, Man., vice W. T. Mains, transferred to Cranbrook, B.C.

P. S. Lindsay, whose appointment as road foreman of locomotives district 3, Central Division, succeeding J. Stuart, was announced in our last issue, will have his headquarters at Brandon, Man.

J. Scott, heretofore general foreman locomotive shops, Vancouver, B.C., has been appointed road foreman of locomotives. Headquarters, Souris, Man.

G. Glasford, heretofore District Master Mechanic, Cranbrook, B.C., has been appointed road foreman district 3, Western Division. Headquarters, Calgary, Alta.

J. A. Kennedy has been appointed acting Trainmaster district 2, Western Division, succeeding A. Hobkirk, transferred. Office, Lethbridge, Alta.

R. W. Drew, heretofore chief clerk General Freight Agent's office, Nelson, B.C., has been appointed Acting General Freight Agent Kootenay and Boundary districts. Office, Nelson, B.C.

A. Hobkirk, heretofore Trainmaster district 2, Western Division, Lethbridge, Alta., has been appointed District Master Mechanic at Cranbrook, B.C., succeeding G. Glasford, transferred.

D. T. Mains has been appointed locomotive foreman at Cranbrook, B.C., vice J. C. Reed, promoted.

J. R. McNabb, who was succeeded as Trainmaster at Cranbrook, B.C., by E. L. Chudleigh, as announced in our last issue, is now running as a conductor in that district.

A. W. Clark, heretofore locomotive foreman at Field, B.C., has been appointed locomotive foreman at Eholt, B.C.

J. C. Reed, heretofore locomotive foreman at Cranbrook, B.C., has been appointed general foreman locomotive shops, Vancouver, B.C., vice J. Scott, transferred to Souris, Man.

J. A. Fullerton, formerly ships husband at Vancouver, B.C., is reported to have been appointed to take charge of the company's trans-Pacific steamship business there.

Stewart Gordon, Manager of the Empress Hotel, Victoria, B.C., has resigned, and it is reported that he will return to England. B. M. Humble, Secretary of the Vancouver Club, and formerly Secretary of the St. James Club, Montreal, is reported to have been appointed to succeed him.

C. H. Reade has been appointed C.P.R. city passenger agent at Tacoma, Wash., vice J. O'Grady, resigned.

W. T. Payne, who was recently appointed General Superintendent of the company's Trans-Pacific Steamship service at Vancouver, B.C., has been appointed Manager of that line and in charge of all the company's interests in China, Japan and Hong Kong. Office, Yokohama, Japan.

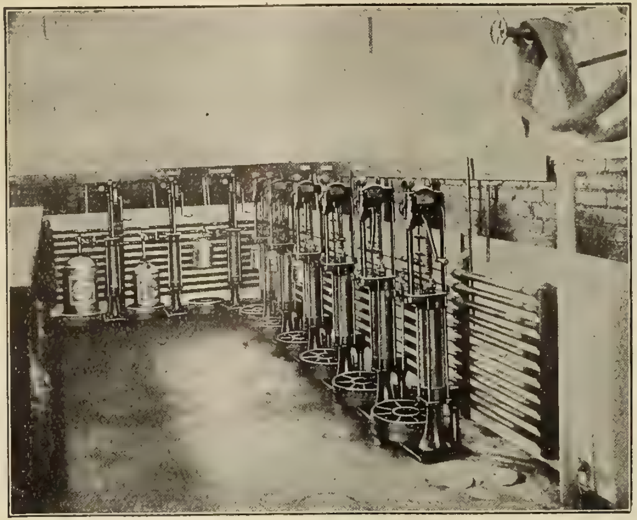
Grand Trunk Ry.—P. G. Flaherty, heretofore Chief Dispatcher Great Northern Ry., U.S., Spokane, Wash., has been appointed Chief Train Dispatcher district 2, west of Richmond, Que., and districts 4 and 5, Eastern Division, G.T.R., succeeding G. M. Stone, assigned to other duties at Montreal. Office, Bonaventure station, Montreal.

A. D. Huff, heretofore Commercial Agent at Pittsburg, Pa., has been appointed Division Freight Agent, Ottawa Division, succeeding E. R. Bremner, resigned. Office, Ottawa.

In our Mar. issue we announced that F. P. Nelson, Soliciting Freight Agent, Toronto, had been appointed chief clerk Division Passenger Agent's office. This should have read Division Freight Agent's office.

W. R. Tiffin, Superintendent Northern Division, at Allandale, Ont., press reports state, will shortly be retired under the operation of the new pension rules.

The following agents have been appointed: Doucets Landing, Que., J. A. Falardeau; Massena Springs, N.Y., D. J. Gates; Wales,



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E. F. Flinn, heretofore Commercial Agent at Cincinnati, Ohio, has been appointed Commercial Agent at Pittsburg, Pa., succeeding A. D. Huff, promoted.

W. K. Evans, heretofore accountant G. T. Despatch Line, Detroit, Mich., has been appointed Commercial Agent Cincinnati, Ohio, succeeding E. F. Flinn, transferred to Pittsburg, Pa.

Intercolonial Ry.—G. Ackman is acting as Claims Agent of the above in succession to E. H. Allen, who resigned Jan. 28, to become Provincial Secretary of New Brunswick, and who was defeated in the recent elections. This information was given by the Minister of Railways in answer to a question in the House of Commons recently.

Quebec and Lake St. John Ry.—See Canadian Northern Quebec Ry.

Toronto Union Station.—C. Farrow, heretofore ticket agent and operator G.T.R., Guelph, Ont., has been appointed to take charge of the ticket exchange office, Toronto Union Station.

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Steam Railway Track Laid in 1907.

Additions and corrections received since the figures published in our last issue were put in type, show that the total mileage of single track laid on Canadian railways during 1907 was 1,469.65 miles, distributed as follows:

	Miles.	Miles.
ALGOMA CENTRAL AND HUDSON BAY RY.		
From mileage 69 to Chippewa River Bridge		0.17
CANADIAN NORTHERN ONTARIO RY.		
Between Parry Sound and French River, Ont	45.3	
Between French River and Sudbury	45.2	
Key Harbor branch	6.0	
Hutton Mines branch	20.6	
Garson Mines branch	3.6	
		120.70
CANADIAN NORTHERN QUEBEC RY.		
St. Jerome to Montford	15.60	
Garneau Jct. easterly	12.40	
St. Anne's River to Belle Isle River	7.50	
		35.50
CANADIAN NORTHERN RY.		
From Brandon to Regina, Sask	219.90	
From Rossburn towards Russell, Man	13.64	
From Cardinal to De Lourdes, Man.	1.24	
From Virden main line to Station, Man	0.63	
Oakland extension, Man	17.14	
Towards Pas Mission, Sask	11.48	
Atikokan spur, Ont	3.31	
		267.34
CANADIAN PACIFIC RY.		
From Nominingue westerly	2.00	
South Bank branch extension, Montreal	0.75	
Toronto-Sudbury Line — Mileage 92.20 to 160.20	68.00	
From mileage 185.70 to 202.50	16.80	
Guelph and Goderich Ry. — From mileage 63.60 to 80.00	16.40	
Listowel branch.—From Linwood towards Listowel	13.00	
Walkerton and Lucknow Ry. — Mileage 0 to 24	24.00	
St. Mary's and Western Ontario Ry. —From mileage 0 to 3	3.00	
Pheasant Hills branch.—Newdorf to Lanigan, Sask	148.70	
Pheasant Hills branch.—Lanigan to Saskatoon, Sask	76.10	
Moose Jaw to Tuxford, Sask	15.30	
Wolseley-Reston branch.—Reston, Man., to Kaiser, Sask	98.20	
		482.25
CROW'S NEST SOUTHERN RY.		
From Fernie to Hosmer, B.C		7.35
CENTRAL ONTARIO RY.		
Bird's Creek to Maynooth, Ont		10.00
INTERNATIONAL TIMBER CO.		
From mouth of Campbell River inland, Vancouver Island, B.C		4.00
MARITIME COAL AND RY. CO.		
From Joggins old mine to new mine		1.00
MIDLAND RY. OF MANITOBA.		
International boundary north of Walhalla, N.D., to Morden, Man.		15.34
NAPIERVILLE JUNCTION RY.		
Loop connecting the line with the C.P.R. and G.T.R. at St. Constant, Que	1.40	
Transfer connection with G.T.R. at Lacolle, Que	0.35	
		1.75
NATIONAL TRANSCONTINENTAL RY.		
Between Quebec Bridge and La Tuque, Que	34.00	
From St. Boniface, Man., easterly.	49.00	
		83.00
GRAND TRUNK PACIFIC RY.		
From track end 35 miles westerly from Portage la Prairie to Ituma, Sask	239.00	
From milepost 416.5 west of Winnipeg, to crossing of the South Saskatchewan River	51.00	
Lake Superior branch.—From Fort William to Knowlton, Ont	100.00	
		390.00
ORFORD MOUNTAIN RY.		
From Mansonville, Que., southwards toward North Troy, Vt		2.50
QUEBEC AND LAKE ST. JOHN RY.		
From mileage 28 to La Tuque, mileage 40	12.00	
From mileage 4 to Clark's, Gosford branch	1.50	
		13.50
QUEBEC, MONTREAL AND SOUTHERN RY.		
From Pierreville to station 1220, Que		4.00
TEMISKAMING AND NORTHERN ONTARIO RY.—From McDougall's Chute to milepost 208		5.00
VANCOUVER, VICTORIA AND EASTERN RY.—Chopaka to Keremeos		18.20
VICTORIA TERMINAL RY. AND FERRY CO.—From International boundary to Olivers, B.C		0.80
WINNIPEG CITY POWER PLANT RY.—From Lac du Bonnet, Man., to Winnipeg River Crossing		2.50
YORK AND CARLETON RY.— Stanley to Ryan Brook, N.B		4.55

Arranged by provinces the mileage is as follows:

	1907	1906
Saskatchewan	609.68	171.76
Ontario	380.38	336.06
Manitoba	349.69	272.69
Quebec	94.00	113.10
British Columbia	30.35	76.09
New Brunswick	4.55	14.85
Nova Scotia	1.00	89.88
Alberta	.....	97.63
Yukon	......	32.00
	1,469.65	1,204.06

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Canadian Northern Ry. Construction.

Canadian Northern Quebec Ry.—It is stated that the Garneau-Quebec cut-off will be completed by the end of July.

Canadian Northern Ontario Ry.—A deputation from Orillia waited on the Ontario Government Mar. 4, to urge the guarantee of the company's bonds for the construction of a line from Udney, mileage 77.5 from Toronto, to a point on the Georgian Bay between Coldwater and Midland, a distance of about 35 miles. W. Mackenzie, President C.N.R., had an interview with the Premier of Ontario Mar. 10, at which the construction of this branch and of other extensions of the old James Bay Ry. are said to have been discussed. In an interview Mar. 14, D. D. Mann, Vice-President C.N.R., stated that it had not yet been settled what construction would be gone on with during the current year. The branch railway and the ore docks at Key Harbor, however, would be completed. It was expected to commence shipping ore from the Moose Mountain iron mines over the branch to Key Harbor at the opening of navigation, and to increase the output of the mines in two or three years to 500,000 tons a year.

Canadian Northern Ry.—It is said that the work of relaying the line between Port Arthur, Ont., and Portage la Prairie, Man., with 80-lb. rails will be started early in the spring. The line will also be reballasted and put in shape for the heavier traffic expected as a result of the opening of the Duluth, Rainy Lake and Winnipeg Ry., in connection with which line through trains are to be operated from Winnipeg and Port Arthur to Duluth, Minn. It is also intended to make a number of improvements at Fort Frances, Ont., which is near the point of junction with the D., R.L. and W. Ry. It was announced, Mar. 5, that the spur connecting the C.N.R. line with the Ontario end of the bridge over the Rainy River, constructed by the Canadian-Minnesota Bridge Co., was expected to be completed by April 1.

A force of men has been engaged all winter on the construction of the line from Etiomami, Sask., towards Hudson Bay, and recent reports state that the grading has been completed to Pas Mission, at the junction of the Saskatchewan and Carrot rivers, a distance of about 100 miles. The surveys to Fort Churchill, a further distance of 325 miles, are in a more or less complete stage. A return presented to the House of Commons, Mar. 2, gives correspondence relating to land subsidies earned in connection with the construction of the projected line to Fort Churchill. In Jan., 1906, the company applied for approval of a route map showing the unconstructed remainder of the company's authorized line between Winnipeg and Hudson's Bay. A year later W. M. McCarthy reported that he had inspected 70½ miles, built from Erwood to the end of the track. It is laid with 60-lb. rails, and was in good condition. In Feb., 1907, the Saskatchewan grain growers met at Regina and passed a resolution urging the more rapid completion of the railway to Hudson Bay. An order-in-council of May 8, 1907, makes it appear that the total number of acres earned and patented by the railway in the west was 1,864,279, and there were 2,788,608 acres still to be earned. On that date, under existing acts, 2,256,341 were to be earned on account of the railway running to Fort Churchill. Correspondence between the departments of the Interior and Railways would seem to indicate that no extension of time for the construction of the railway and the earning of the subsidy has been provided for, and the Railway Department's contracts with the company with respect to land subsidies on this line expired on July 10, 1906. The company in reply to this maintained that the order-in-council of May 8, 1907, gave them the necessary extension.

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Recent British Columbia Legislation.

The following acts affecting transportation interests were passed at the recent session of the B.C. Legislature:

Crow's Nest and Northern Ry.—Act of incorporation.

Eastern British Columbia Ry.—Act of incorporation.

Grand Trunk Pacific Ry.—Act respecting the company's lands at Prince Rupert.

Hudson Bay Pacific Ry.—Act of incorporation.

Labor Regulation Act.—Amending the Act of 1907.

Ladysmith Lumber Co.—To enable the company to construct and operate a logging railway on Vancouver Island.

Nelson.—Enabling the city of Nelson to borrow $85,000 for electric light and power purposes.

Railway Assessment Act.—Two acts amending the Act of 1907.

Vancouver and Nicola Valley Ry.—Act of incorporation.

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TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio, has received an order for a large tonnage of staybolt iron to be used in 30 locomotives which the American Locomotive Co. is building for the Paris and Orleans Ry., of France.

The Canadian Westinghouse Co. have issued the following publications: Magnetic Brakes, a paper read by A. L. C. Fell before the Tramway and Light Railway Association, London, Eng.; The Effect of Brake Beam Hanging upon Brake Efficiency, a paper read by R. A. Parke before the New York Railroad Club, and two instruction pamphlets, the Type L Triple Valve and the Type M Triple Valve.

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Coal and Iron Mining Railways.

In addition to the various steam railways doing a general freight and passenger business in various sections of the Dominion, the annual statistics of which were published as usual in our April issue, there are several lines owned by coal and iron mining companies and operated for their private purposes. Of seven of these companies five are located in Nova Scotia and two in British Columbia. The total length of line operated is 144.49 miles, all of which except one mile is laid with steel rails, and the companies own 50 locomotives and 2,625 cars. During the year ended June 30, 1906, they carried 5,198,375 tons of coal, 219,050 tons of iron ore, 100,996 tons of iron, and 497,009 tons of other freight, a grand total of 6,015,430 tons. With the exception of the Dominion Coal Co.'s line, the Sydney and Louisburg Ry., none of these lines are included in the general railway statistics of the Dominion. In these the Nova Scotia Steel and Coal Co. is mentioned as operating the line of the old New Glasgow Iron, Coal and Ry. Co., 72.50 miles, from New Glasgow to Sunny Brae, N.S., and the Wellington Colliery Co. is referred to as operating a line of 10.75 miles from Union Bay to Cumberland, B.C. The freight statistics given in the general report vary from those given in the report as to coal lines; while those given in connection with the Dominion Coal Co.'s line agree with those given under the Sydney and Louisburg Ry. in the general report. Following are the principal particulars with respect to the different lines:

Acadia Coal Co., Ltd.—Intercolonial Ry. to Slopes Colliery, 2.50 miles; Allan Shaft colliery to New Glasgow, N.S., 1.00 mile; sidings, 2.50 miles; New Glasgow to Thorburn, 6.00 miles; sidings at Thorburn, 1.00 mile; sidings along route, 1.00 mile; total mileage operated, 14.00 miles; standard gauge; 13 miles of track laid with 56 lb. steel rails, and one mile laid with 50 lb. iron rails; two junctions with other railways. The company owns three locomotives, and during the year ended June 30, 1906, carried 124,000 tons of coal, and 10,000 tons of other freight.

Intercolonial Coal Mining Co.—Drummond colliery to Abercrombie pier, Pictou Harbor, N.S., 10.00 miles; Drummond colliery to Drummond siding, connecting the colliery with the Intercolonial Ry., 0.50 mile; total mileage operated, 10.50 miles; standard gauge, laid with 56-lb. steel; one junction with, and one crossing of another railway. The company owns two locomotives and 170 cars; and during the year ended June 30, 1906, carried 255,377 tons of coal, and 10,960 tons of other freight, mostly wood for timbering mines.

Londonderry Iron Co.—Londonderry, N.S., to Londonderry station on the Intercolonial Ry., 2.50 miles; East Mines to East Mines station, 4.00 miles; Londonderry to West Mines ore workings, 5.00 miles; siding round works at Londonderry, N.S., 3.50 miles; total mileage operated, 15; of which 5 is 3 ft. gauge, the remainder being standard gauge. It has two junctions with other railways. The company owns four locomotives and 66 cars, and carried during the year ended June 30, 1906, 114,325 tons of coal, 87,540 tons of iron ore, 41,498 tons of iron, and 43,000 tons of other freight.

Nova Scotia Steel and Coal Co.—Sydney Mines to North Sydney, N.S., 5 miles; branch, Sydney No. 1 to Sydney No. 3, 3 miles; sidings at Sydney, 23 miles; total mileage operated, 31 miles; standard gauge, laid with 56 and 80-lb. steel rails; one junction with other railway. The company owns nine locomotives and 340 cars, and carried during the year ended June 30, 1906, 639,077 tons of coal; 131,510 tons of iron ore, 59,498 tons iron, and 229,550 tons of other freight.

Dominion Coal Co.—Sydney to Louisburg, N.S., 39.30 miles; main line to Bore Hole, 0.04 mile; main line to International mine, 0.25 mile; main line to Reserve mine, 2.30 miles; main line to Caledonia mine, 1.20 miles; main line to Hub mine, 0.93 mile; main line to point in direction of Point Morien, 0.38 mile; main line to Glace Bay wharf, 1 mile; main line to Wash plant, 0.54 mile; main line to Dominion No. 6 colliery, 5.32 miles; main line to Mira quarry, 0.25 mile; main line to Sydney coal yard, 1.23 miles; leased main line to I.C.R. at Sydney, 1.25 miles; total mileage operated, 53.99 miles, all laid with 80-lb. steel; standard gauge. The company owns 23 locomotives and 1,527 cars, and during the year ended June 30, 1906, carried 3,570,115 tons of coal, and 200,846 tons of other freight.

Wellington Colliery Co.—Ladysmith to Wellington, B.C., extension, 11 miles; Esquimalt and Nanaimo Ry., Ladysmith to wharves at Ladysmith, B.C., 1 mile; siding, 1 mile; total mileage operated, 13 miles; standard gauge, laid with 50 and 60-lb. rails. The company owns six locomotives and 250 cars, and during the year ended June 30, 1906, carried 335,149 tons of coal and 1,563 tons of other freight.

Western Fuel Co.—Wharves to Harewood mine, B.C., 7 miles of standard gauge, laid with 56-lb. steel rails. The company owns three locomotives and 272 cars, and during the year ended June 30, 1906, carried 160,332 tons of coal and 1,000 tons of other freight, consisting almost entirely of mine stores and timber.

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National Transcontinental Ry.

Contracts were awarded, Mar. 28, for six sections of the railway, aggregating 366 miles, as follows:

To the G.T. Pacific Ry. Co.—From a point 58 miles west of Moncton, N.B., westward for 39.7 miles; and from the latter point westward to the Tobique river, N.B., 67 miles.

To the Willard-Kitchen Co.—From the Tobique river to Grand Falls, N.B., 31.5 miles.

To M. P. & J. T. Davis—From the Quebec-New Brunswick boundary westward 52.4 miles.

To E. F. & G. E. Fouquier—From a point 8 miles west of the Abitibi river, Ont., westward 100 miles; and from Lake Nepigon westward 75 miles.

Board of Railway Commissioners.

A sitting was held at Toronto, Mar. 11, to take up such cases from the city and vicinity as the Deputy Commissioner and Commissioner Mills could dispose of. A sitting was held at Ottawa, Mar. 12, when decisions were given in a number of cases, and consideration was given as to the position in which others were in consequence of the death of the Chief Commissioner. Sittings of the Commission to dispose of local cases were held at Peterborough, Mar. 17; Toronto, Mar. 18; Ingersoll, Mar. 19, and Chatham Mar. 20.

A bill having for its object the reorganization of the Board has been given considerable consideration at the current session in the House of Commons. The bill provides for a commission of six members, the Chief Commissioner and the Assistant Chief Commissioner can be selected from the ranks of the judges or barristers of ten years' standing; making the Assistant Chief Commissioner eligible for the position of Chief Commissioner, giving the Assistant Chief Commissioner all the powers of Chief Commissioner. In the case of the absence of both the Chief and the Assistant Chief Commissioner the Deputy Chief Commissioner shall exercise the powers of Chief Commissioner. The Chief Commissioner is to preside at all meetings, and in his absence the Assistant Chief Commissioner will preside, and the opinion of either of them upon any question arising when he is presiding, which in the opinion of the Commissioner is a question of law, shall prevail. The Chief Commissioner's salary is fixed at $10,000 a year; the Assistant Chief Commissioner's salary at $9,000, and the Commissioners at $8,000 a year each. These provisions are in substitution of sections in the act now standing on the Revised Statutes. New sections provide for the holding of more than one sitting at the same time; authorizing the Minister of Railways to establish such offices anywhere in Canada as may be required; and also making some amendments in connection with the procedure before the Board.

An order-in-council was passed Mar. 21, appointing James Pitt Mabee, one of the Justices of the High Court of Ontario, to be Chairman of the Board of Railway Commissioners of Canada. Mr. Mabee was born at Port Rowan, Ont., Nov. 5, 1859; was educated at the Port Rowan High School, and matriculated Nov., 1877. He was called to the Ontario Bar Nov., 1882, and practised from 1882 to 1887 at Listowel, Ont., and from 1887 to Jan. 1, 1905, at Stratford, Ont. He was appointed a King's Counsel in 1901, and from Jan. to Nov., 1905, practised at Toronto, as a member of the firm of Beatty, Blackstock & Co., retiring therefrom on his appointment to the High Court of Justice of Ontario. From Jan. to Nov., 1905, Mr. Mabee was also Chairman of the Canadian section of the International Waterways Commission, and from Mar., 1906, to Mar., 1908, a member of the Statute Revision Commission, on the appointment of the Ontario Government.

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W. A. Hunt, formerly chief clerk in the C.N.R. Accountant's Dept., Winnipeg, has been sentenced to two years' imprisonment for defrauding the company by means of forged pay checks.

R. Robertson & Sons, Ltd., has been incorporated under the Ontario Companies Act, with a capital of $30,000 and offices at Toronto, to establish a general contracting business for the construction of railways, bridges, subways, etc. R., J., W. E., Jas., and C. S. Robertson, Toronto, are the provisional directors.

Maintenance of Freight Car Air Brakes.

By W. C. Hunter, Manager New Brunswick Coal and Ry. Co.

When we stop to consider that there are in round numbers 2,000,000 freight car air brakes in operation at present in the United States and Canada, representing an aggregate investment of approximately $60,000,000, it would seem that the maintenance of the same in efficient condition is an important subject, not only because inefficient air brakes fail to earn a fair return on their cost as a train stopping mechanism, but from the fact that air brakes in bad order are capable of, and do cause loss and damage to lading and rolling stock, the aggregate cost of which is practically an incalculably large sum. It follows, however, that a very necessary feature of the work of such maintenance is a well-defined system of keeping check of all air brake repairs, and also of the general condition of the brakes in service.

Every freight car air brake should get a general overhauling at least once a year. It is evident, however, to get this result that these operations cannot be confined to repair tracks, but the work can be done on the loading and unloading tracks of freight depots at larger terminals where cars stand for hours and sometimes days. Some railways are doing this, and have installed air plants at such points, so that brakes on cars at these points can be tested to find defects, and also to thoroughly test as the work is done, and therefore when the cars are put into trains there remains nothing to do but make the terminal test from the locomotive. This avoids much delay to freight en route by holding cars for air brake repairs.

Following is a description of how one important Canadian railway is doing this work, keeping record of the work done, and the general condition of its freight car air brakes. As an example, I will take one of its large terminal points. It extended the yard air plant to reach the freight depot tracks, and located the piping to reach tracks holding about 300 cars, so there are always plenty of cars to work on. It uses 1¼ inch pipe, locating the hose boxes about 100 ft. apart and carrying 90 lbs. air pressure. Two men are employed there who do nothing else whatever during the season but test and overhaul air brakes on these tracks. The men are supplied with all necessary tools, including a piece of hose 50 ft. long fitted with air hose couplings at each end, several pieces of pipe from 4 to 10 ft. long with air hose at each end, and a portable brake valve. With these, couplings can be made around a "non-air" car, or from one track to another. This point is equipped with the Westinghouse triple valve testing devices, and triple valves are cleaned and tested in a room fitted up for the purpose. The men work under a terminal car foreman and are kept supplied with all repair parts required. They are especially instructed for this work and become very proficient. The work is stencilled on the side of the auxiliary reservoir, giving letter designating place, and the date—for instance, J., 20-8-03. This stencil covers the following work done: Triple valve cleaned and oiled, or changed. Brake cylinder cleaned and oiled. Pipe clamps and cylinder blocks tightened. Piston travel adjusted. Hose tested with soap suds, and couplings and gaskets tested and renewed if required. Angle cocks, cut-out cocks, release valves and retaining valves are tested and required repairs made. Pipe work is tested and repaired if required, and brake shoes applied if needed. In fact, every brake gets a general overhauling if in service one year since the last stencil

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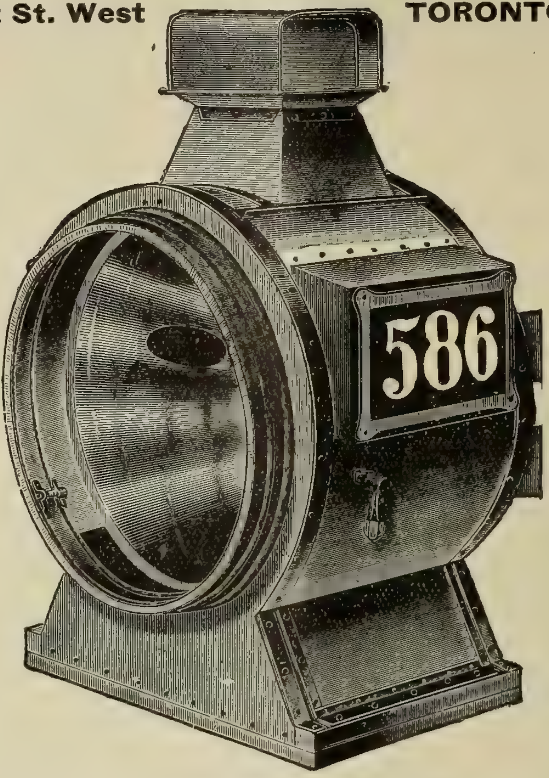

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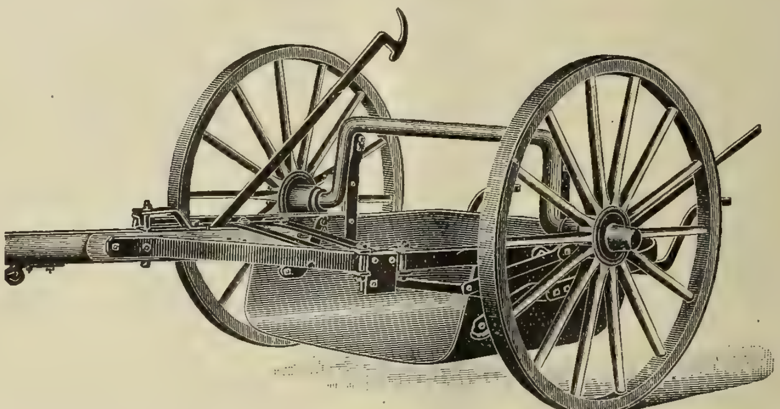

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mark, or in any case if a test shows that it requires it. The result of one season's work at that point, which is fairly indicative of the work done at all such points, showed an average cost of 73.8c. per car, not including brake shoes. Beside the work done at freight depot points, the usual air brake running repairs are carried on at the repair shops and tracks.

Referring now to the system of keeping record of these general repairs to air brakes. The form shown here, no. 597, and designated as report 4, is sent to the General Air Brake Inspector by the terminal car foreman at the end of each month. The General Air Brake Inspector has a set of car record books sufficient to index every car on the railway. Each book will index 4,000 car numbers, and for this system of air brake records, will last 10 years. The books are arranged to furnish an index for each car number. Opposite each number on its own line is copied from the form the date and place letter where the air brake last received a general overhauling, and they file the forms for reference each month separately. The officials are thus able in a moment to tell just when and where any car on the railway had its air brake overhauled, what was done to it, and when it is due to be again overhauled, which last mentioned feature you can easily recognize the value of. They are also able to keep a record of air brake work done on freight cars. The record thus serves as a check on bills for such repairs. They are also able to detect mistakes or carelessness in reporting air brake repairs, which, without such a record, would pass unnoticed, and any attempt to do the work with the stencil alone is sure to be detected. Another large railway using a similar recording system, prefers a card index instead of the books, and I believe it is found very satisfactory. In tracing up responsibility for slid flat wheels and damage to lading or draft-gear, the record is also very valuable and is a time-saver.

(REPORT NO. 4.) Form 597

A. B. C. RAILWAY.

REPORT OF AIR BRAKE REPAIRS.

On.....................*Cars at*..........................., *during Month of*...190...

Date	Car Initials	Car Number	Triple Valve Cleaned and Oiled or Changed	Cylinder Cleaned and Oiled	PipeClamps and Cylinder Blocks Tightened	Piston Travel Adjusted	Air Brake or Signal Hose Renewed	Angle Cock or Cutout Cock Repaired	Release Valve Repaired	Retaining Valve Repaired	Pipe Work Done	Date and Place of Former Cleaning	Place or Letter Last Stencil'd	Other Repairs to Brake	Is Brake now in Good Condition

NOTE.—Shop Foremen and Car Inspectors must fill out this Form and read it to the General Air Brake Inspector on the first of each month. Care must be taken to make a full report of all Air Brake repairs.

Car Inspector.................................

Referring now to the system of keeping daily check of the condition of freight car air brakes running on the whole railway, and the reporting of defects by the use of the air brake defect card, and following up the repairs of the said reported defects, they are able to show results which are particularly gratifying. They use for this three printed forms; first, the air brake defect card; next, the conductor's report of condition of air brakes, form 641 and form 643. The last is simply a printed letter with a few blank spaces to fill in. The last two mentioned forms are shown and are designated as reports 5 and 6 respectively.

No..............

A. B. C. RAILWAY

DEFECTIVE AIR BRAKE

Card applied to Car No................**Initials**.........
By Conductor...................................**Train**..........
Or by Inspector.................................**at**..................
For Defect No...................
Destination of Car...................**Date**..........**190**.

INSTRUCTIONS.--Use figures to indicate defects.
Send this Stub to the......................by first train mail.

(REVERSE OF CARD NO. 1) No.........................

A. B. C. RAILWAY

Form No.

DEFECTIVE AIR BRAKE

This Car CAN NOT be placed between Air Brake Cars

Car No....................**Initials**.....................**Train No**...................**Date**.....................**190**........

DEFECTS

17. Train Pipe{**A End** / **B End**} **18. Cross-over Pipe** **19. Angle Cock**{**A End** / **B End**}

Car applied at...**by Conductor**..
Or by Inspector..
Repairs made at.......................**by Inspector**..
Date...**190**........

INSTRUCTIONS.—To indicate the defect draw a line through the description, detach the Stub and send it to the...

Tack the Card to the B end of Car, just over the buffer block.

When repairs are completed send this Card to the...

The air brake defect card is used by the train conductors according to the instructions printed on the card itself. These cards in some form are doubtless familiar to most of us and there is considerable variation in their style, but a uniform style of air brake defect card is a subject now up, and it is needless therefore to go into a description of the card used here. The air brake defect card is of course only to be used to indicate defects in the air brake when found, but the second mentioned form, called the conductor's report of condition of air brake, is sent to the General Air Brake Inspector for every freight train run, no matter what the conditions of the brakes are. The use of this form has more than met expectations. It will be seen that, while this form is very simple and condensed, it at the same time covers a great deal of information. By its use one is able to tell just how many freight car air brakes are in operation on the railway each day, just how many were in good order, just how many were bad and cut out, on what part of the railway the most trouble occurs with the brakes, and what it consists of. The freight train conductor is enabled by this form to make a correct report of any trouble which may have occurred with the air brakes on the trip, and it is found that a considerable number of men value this feature very much. It also encourages them to report anything, however small, that may come to their notice. The use of the form by the conductors necessarily requires inspection of the train en route, and it follows that defects are discovered where they exist, and are carded with a defect card, so that the use of this form compels the use of the air brake defect card. Thus one very beneficial result is gained. Conductors are required to know of and report slid flat wheels on this form, which in itself acts as a preventive of such occurring while in their charge, and is also of great value in correctly locating the responsibility when it does occur. Conductors are required to make out this form in duplicate. One copy goes to the car inspector at the terminal on arrival, and he is thus notified of the condition of the air brakes on the train. Therefore, he has no excuse for failure to see any defect cards which may be on the cars. An accurate check is kept on the conductors to prevent failure to send in this report and strict observance of the use of the air brake defect card is enforced. The most valuable feature of the use of this conductor's report is that it keeps the General Air Brake Inspector in close touch with the air brake situation all over the railway, and this increases his usefulness to a very considerable degree. Take any other official in the mechanical or operating departments, and they almost always have a system of obtaining prompt information of the condition of, and failures occurring to the parts of the equipment under their charge, and are thus able to deal promptly with irregularities and the causes thereof. The air brake is in itself a special equipment, and on most railways is, to a more or less extent, under the direct charge of a general air brake inspector, who is expected to render good service by keeping it in efficient condition, with a minimum of failures, and to be able to render prompt and accurate reports of such to his superior officer. To do this, he should be in constant and prompt receipt of the necessary information. It is sometimes the case on railways that while they have a general air brake inspector, he is only informed of how the air brake equipment is working day by day in a hearsay way, and, if irregularities occur, he is often only informed of such when a batch of correspondence reaches him for "his opinion and recommendation," or "to take up and prevent a recurrence of," perhaps a month or more after the trouble occurred. To overcome this difficulty, and to keep him in close touch with the air brake situation on all parts of the railway, this form is admirably adapted, and as a result, he is able to promptly take up all the irregularities and investigate them himself when the matter is fresh, and thus can take measures to prevent as much as possible a recurrence. As example of the use of this form, one is received by the General Air Brake Inspector with the statement thereon that there were 20 good air brakes on the train, but were not in use because the pump on the locomotive was disabled. Prompt investigation disclosed the fact that a certain engineer needed instruction as how to handle a refractory pump, and also the fact that a certain pump was in bad order, and that a repair man was responsible for not putting it in good order when entrusted with the job. It follows that steps were taken to prevent such occurring again. Following is another case: A conductor reports an angle cock closing itself, caused by loose train pipe clamps permitting the angle cock plug to strike the buffer block when the car was running. This indicated careless car inspection at a certain point, or points. Still another case follows: A conductor reports a train with so many brakes cut out that it indicated failure to make repairs

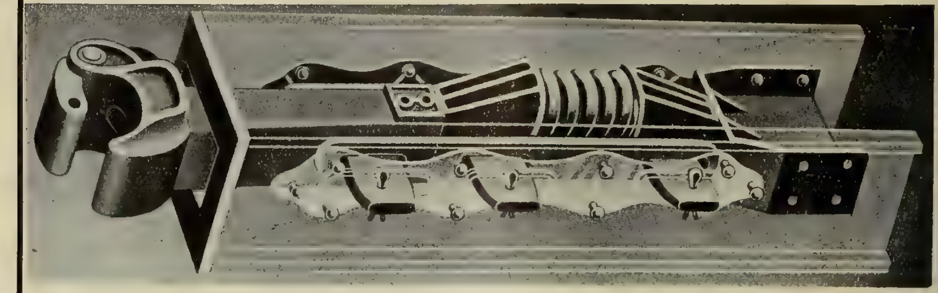
(REPORT NO. 5.) FORM NO. 641

A. B. C. RAILWAY.

CONDUCTOR'S REPORT OF CONDITION OF AIR BRAKE.

Train.................... *Arriving at*.................... *Date*.................... 190...
Engine No.................... *Engineman*....................
Number of Air Brakes cut in and operating....................
Number of Air Brakes not operating and with Air Brake Defect Card applied....................
Did any trouble occur with Air Brakes on trip?....................
Cause....................
Are there any Slid Flat Wheels on Train?....................
If so, give Numbers of Cars....................
Conductor....................

THE
FARLOW TWIN SPRING DRAFT GEAR



Designed for Wooden or Steel Cars and Engines.
Pulling Strains Distributed Equally on the Three Cross Keys.
Buffing Shocks Distributed on End Sill, Three Cross Keys, Filler Block and Body Bolster. Cannot be Pulled Out or Driven Back and Will Not Spread Sills.

FARLOW DRAFT GEAR CO.
BALTIMORE, MD. CHICAGO, ILL.

BRANTFORD CONCRETE MIXER

The Only Successful Automatic Batch Mixer Made
GOOLD, SHAPLEY & MUIR COMPANY, Limited
BRANTFORD, CANADA

by certain repair men, and the investigation also disclosed a failure to make a terminal test by the crew. All of such irregularities are immediately investigated and taken up with the responsible parties, and such instruction and encouragement given; or, if necessary, such discipline administered as to prevent a recurrence.

(REVERSE SIDE OF REPORT NO. 6)

INSTRUCTIONS.

Conductors of Freight Trains will fill out this form in duplicate, and send one copy to the General Air Brake Inspector, and deliver the other, along with his way bills, at the end of each trip. The Car Inspector to ask for and get them as soon as possible after arrival of the train.

If the Car Inspectors at terminals do not receive this Form for each Freight Train arriving at their station, they will write across the face of one of these Forms the words "No report," and enter the Train No., Date, and Conductor's name. Sign it and send it to the General Air Brake Inspector.

The third form shown here, 643, explains itself as referred to in speaking of the defect card stub, the destination of the car to which its card is applied is shown. These stubs are kept in the General Air Brake Inspector's office and at the end of each month, the cards which had been received from the repair men all over the railway are matched with the stubs, and if any stubs are left over without cards having arrived to match them, this form is filled out from these stubs and sent to the Master Car Builder, who signs it, and sends it to the terminal car foreman who received the cars, according to destination written on the stubs, and who should have made the repairs and sent in the defect card. The result is that all car inspectors and car foremen now find that the General Air Brake Inspector is watching every defect, that every conductor is helping him by discovering and reporting the same, that these reported defects must be repaired, and that failure to repair them will be noticed and an explanation will certainly be called for as per this form.

FORM NO.

A. B. C. RAILWAY.

..........................190....

MR..........................

....

DEAR SIR:—
Stubs from the Air Brake Defect Card, Form......, have been received at this office, showing that during the month of............the following cars were forwarded to your Station, with the Air Brake Defect Card attached.

CAR NUMBER	INITIALS	CAR NUMBER	INITIALS

As these Cards have not been returned by you to this office, it is presumed you did not make the necessary repairs. Please let me have your explanation.

Yours truly,

....
General Air Brake Inspector.

The new result of this system is very gratifying and is more apparent as the time goes on. This system is capable of expansion to meet the requirements of any railway, no matter how large. Of course, on large railway systems, it will require clerical help, but one clerk should be able to handle it in almost any case. The cost of stationery used is also an item of expense, but that this system pays there is not the slightest doubt. In fact the railway referred to found for one thing that this system reduced the average number of slid flat wheels 60% in six months. When we consider that it necessarily begets the co-operation of all concerned in the train service, from superintendents to the youngest brakeman, in getting successful operation of the air brakes, it seems to me that much has been gained. The fact that the General Air Brake Inspector is able at any time to furnish his superior officer with exact data as to the condition of the air brakes on the whole railway is in itself worth all the trouble and expense, and is particularly useful when it is desired to point out the necessity of some requirement for improvement of the service. The system of recording takes in the passenger car brakes, and is easily applicable to locomotive brakes with modifications to meet locomotive conditions.

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The British Columbia General Contract Co. is being wound up under Chap. 144, Revised Statutes of Canada, F. C. Sewell and J. Kendall having been appointed provisional liquidators. The order was made on the petition of W. H. Malkin & Co. (Ltd.) and others.

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ELECTRIC RAILWAYS.

London Street Railway Company.

Following are extracts from the report for the year 1907:

EARNINGS.

	1906	1907
Passengers	$199,528.61	$226,509.77
Miscellaneous	3,383.07	5,866.82
Gross earnings	$202,911.68	$232,376.59

EXPENSES.

MAINTENANCE:		
Way and structures	$ 17,542.95	$ 17,294.91
Equipment	28,433.26	24,279.36
TRANSPORTATION		
Power plant	28,656.00	32,882.44
Car service	60,712.87	65,864.88
GENERAL	24,0 3.31	27,703.29
Total operating expenses	$159,428.39	$168,024.88
Net earnings	$43,483.29	$64,351.71

DEDUCTIONS.

Interest on bonds	$25,000.00	$25,000.00
Interest on overdraft	923.94	2.228.64
Total deductions	$25,923.94	$27,228.64
NET INCOME	$17.559.35	$37,123.07

The policy of the directors to keep the properties in the very best condition has been followed during the year, and in addition the following improvements have been made: Track and roadway, guard rail, Springbank line and Pottersburg loop, new track in car house and yard, purchase of sewer beneath Dundas street tracks, railroad crossing derail and signal system, ordered by Railway Commission, $4,508.97. Electric line, trolley wire on account of new car house and terminal, lightning arresters and negative feeder, $433.00. Battery building and new car house, $6,900.01. Power plant equipment, part payment on 320 amp. storage battery, additional circuit breakers, $14,346.44. One new 24-in. drill and motor, $237.38. 5 new cars, 39 fenders and new trucks, $10,564.57. Electrical equipment of cars, $12,063.43. Paving, $3,273.70. Ten fire extinguishers, $124.15. Total, $52,451.65.

By the additional cars purchased and put on the service during the year, the equipment is quite adequate for ordinary demands. With the installation of a 320 ampere storage battery plant, the power facilities are now sufficient to meet the heavy requirements for summer traffic. To provide storage for the additional cars purchased during the past two years, a car house and terminal was built on the property adjacent to the power house, which is very convenient for their successful operation. Pending a legal census a request was made by the city to consider an extension to the company's lines in the northeasterly part of the city. The matter is under consideration. During the first part of the year a committee from the city council approached the directors upon the subject of purchasing the company's properties by the municipality. It was agreed to enter into negotiations, subject to the approval of the shareholders, when the city had the necessary legislation to purchase. All agreements with the city have been fulfilled and the service greatly improved. The directors intend to dispose of an additional issue of $50,000.00 5% bonds to offset the present bank overdraft occasioned by additions to the properties. It is with pleasure the directors draw attention to the remarkable increase in gross earnings and surplus for the past year and confidently expect that the coming year will prove also satisfactory. No suits are pending from last year's business. There were 52 shareholders of record Dec. 31, 1907.

ASSETS.

	1907.	
Road and equipment, real estate, buildings and plant	$1,053,023.33	
Improvements, additions, etc.	52 451.65	$1,105,474.98
Cash on hand	$ 1,697.81	
Accounts receivable	2,092.03	
Stores	22,108.48	
Coal stock	1,248.06	
Suspense	8,198.62	
Uniforms	161.42	
Sundries (prepaid accts.)	72.72	
Injuries and damages		35,579.14
Grand total		$1,141.054.12

LIABILITIES.

	1907.	
Capital stock	$ 540,024.00	
Bonds—5%	500,000.00	
Mortgage (Bathurst St. lots)	750.00	$1,040.774.00
Bond interest	$ 7,808.00	7,808.00
Molsons Bank (overdft.)	$ 30,003.24	
Accounts and wages payable	21,248.54	
Dividend payable Jan. 2, 1908	16,200.72	67,452.50
Ticket float (unredeemed tickets)	$ 3,461.73	
Injuries and damages fund	419.12	
Profit and loss (surplus).	21,138.77	25,019.62
Grand total		$1,141,054.12

PROFIT AND LOSS ACCOUNT.

Surplus, Jan. 1, 1907	$ 591.09
Net income for 1907	37,123.07
Unclaimed wages	85.33
	$37,799.49
Dividend 3% payable Jan. 2, 1908	$ 16,200.72
Directors' tickets and auditors' fees	460 00
Surplus	21,138.77
	$37 799.49

Statistical information: Gross earnings, $232,376.59; operating expenses, $168,024.88; expenses per cent. of earnings, 72.3; net earnings, $64,351.71; net income per cent. of capital, 6.88; passengers carried, 6,321,994; car earnings per revenue passenger, 3.63c; transfers, 1,039,362; total passengers, 7,361,356; car earnings per passenger, 3.07c.; car mileage, 1,435,993; gross earnings per car mile, 16.18c.; operating expenses per car mile, 11.70c; net earnings per car mile, 4.48c.; number of miles of track, 33.25; gross earnings per mile of track, $6,988.77; population, city estimates, 47,769.

The directors and officers are as follows: President, H. A. Everett, Cleveland, Ohio; Vice-President, T. H. Smallman, London, Ont.; other directors, P. W. D. Broderick, W. M. Spencer, London; H. S. Holt, Montreal; E. W. Moore, C. W. Wason, Cleveland; Sec.-Treas., G. H. Bentson; Manager, C. B. King.

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Halifax Electric Tramway Company.

Following are extracts from the report for the year 1907: The net earnings show an increase of $4,599.71 over 1906. The usual quarterly dividends at the rate of 6% per annum have been paid, leaving a surplus of $65,508.23, from which have been deducted interest on loan, and for renewals of track and other necessary improvements, $10,643.22. Additions to plant and rolling stock, including street paving and double track to the value of $78,603.49, have been made during the year, which amount has been transferred to permanent investment account. The interruption to traffic in consequence of street paving operations and renewing of water pipes by the city, was the cause of serious loss in revenue, and, as there is yet several weeks' work to be done during the coming summer, it is not to be expected that the full benefit of regular and uninterrupted car service can be enjoyed until this work is completed; nevertheless, the percentage of expenses to income bears a very satisfactory comparison with any previous year.

ASSETS.

Property	$2,353,522.07
Accounts receivable	44,534.44
Supplies	18,434.36
Suspense account	12,2 2.67
Cash on hand	29,729.78
	$2,458,483.32

LIABILITIES.

Capital stock	$1,350,000.00
5% bonds	600,000.00
Accounts payable	51,618.48
Notes payable	120,000.00
Bond interest	15,000.00
Dividend due Jan. 1, 1908	20,250.00
Tickets outstanding	1,288.54
Surplus account	300,326.30
	$2,458,483.32

INCOME ACCOUNT.

Passenger receipts	$ 173,870.64
Light and power earnings	173,943.31
Gas earnings	56,798.98
Sundry earnings	839.47
	$ 405,452.40
Operating expenses	$ 228,944.17
Coupons	30,000.00
Net earnings	146,508.23
	$ 405,452.40

SURPLUS ACCOUNT.

Balance, 1906	$ 252,053.33
Net earnings, 1907	146,508.23
	$ 398,561.56
Three dividends paid	$ 60,750.00
Dividend due Jan. 1, 1908	20,250.00
Interest	6,592.04
Renewals	10,643.22
Balance	300,326.30
	$ 398,561.56

Statistical information: Railway earnings,

TORONTO BOLT AND FORGING CO.
LIMITED
Manufacturers of
BOLTS AND NUTS
OF ALL KINDS, INCLUDING
Track Bolts
Track Spikes
Lag Screws
Boiler and
Bridge Rivets
TORONTO CANADA

IDEAL RAILWAY FENCING
MADE TO LAST
Large gauge (No. 9) hard steel wire is used throughout, decreasing cost of maintenance, insuring durability and serviceability.
IDEAL FENCE has been adopted as a standard by all the leading Railways in Canada. More IDEAL is used by Railways this year than all other makes combined.
Write for Prices and Catalogue
The McGregor Banwell Fence Co.
LIMITED
WALKERVILLE, ONTARIO

$120,568.17; electric light and power, $77,262.29; total earnings, $197,830.46; operating expenses, $113,081.92; bond interest, $30,000; net earnings, $57,748.54; dividends paid and interest, $48.000; surplus, $6,748.54; per cent. operating expenses to income, 59.06; passengers carried, 2,419,268; car mileage, 593,608 incandescent lamps, 14,225; arc lamps, 309; stationary motors, h.p. 216.

The officers and directors are: President, Hon. D. MacKeen; Vice President, J. Y. Payzant, W. B. Ross; other directors, A. Kingman, J. Hutchison, J. C. Mackintosh, H. S. Poole, W. M. Doull, C. C. Blackadar; Manager, J. W. Crosby; Secretary, W. J. DeBlois.

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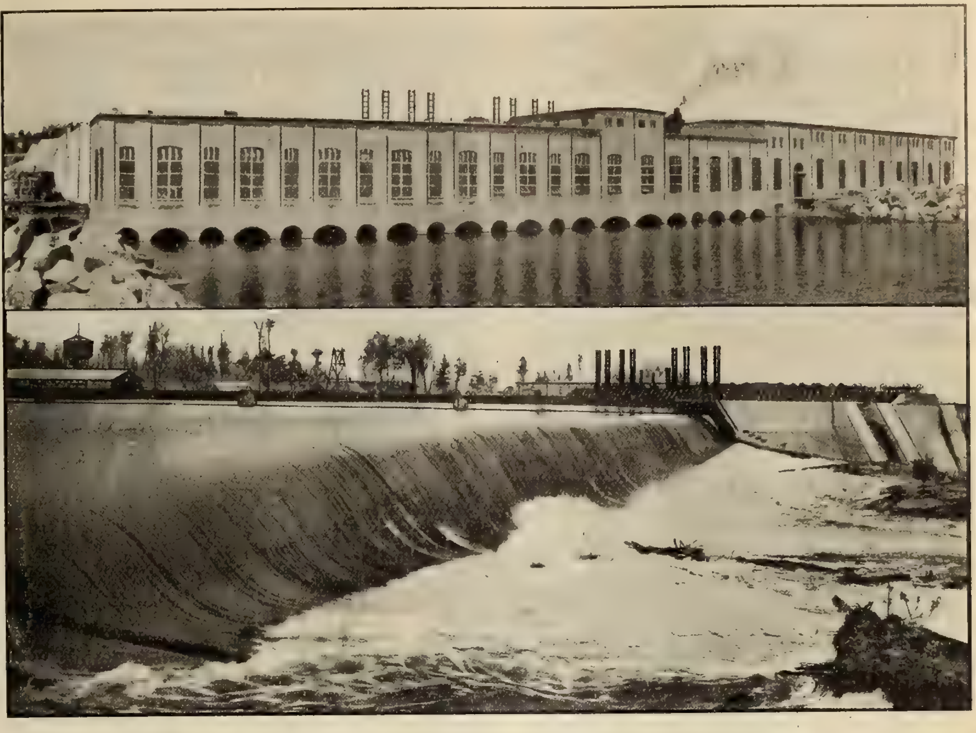
Winnipeg Electric Railway Company.

Following are extracts from the report for the year 1907:

The gross profits are $946,675.67, compared with $714,341.32 in 1906. After providing for percentages on earnings accrued to the city and interest on bonds, the directors declared four quarterly dividends, amounting to $373,136.67, leaving a surplus of $186,871.90, which has been transferred to credit of profit and loss, making a total credit to this account to Dec. 31, 1907, of $806,310.63. The percentages of earnings show an increase of 21.62% compared with 1906, while the operating expenses show an increase of 10.53% as compared for the same period. The net earnings show an increase of 30.75% over those of 1906. The roadbed, rolling stock, buildings and other properties have been efficiently maintained. The company's hydraulic works at Pinawa channel of the Winnipeg River have given great satisfaction. The car service, both as to efficiency of operation and equipment, compares favorably with the service or equipment of any street arc company in America. During the year the following improvements and additions were made, forty additional large, double-truck, closed cars added to the system; 20 having been constructed at the company's own shops in Winnipeg, and 20 in Ontario. All cars have been equipped with air brakes and heaters provided for the motorman's vestibule in all cars. Nineteen and a half miles of track were constructed; 6½ miles of this being surface track with ballast, and 13 miles being track with concrete foundation. 1,588 new poles were put up in the extension of electric lighting and power lines, with 340,088 lbs. of wire. 48,007 ft. of new gas mains were put down in the extension of gas mains. 838 new gas services were put in. Addition to Fort Rouge storage barn, with capacity for 50 cars.



THE WINNIPEG ELECTRIC RAILWAY CO.'S WATER PLANT, PINAWA CHANNEL, WINNIPEG RIVER, 30,000 h.p.

ASSETS.

Cost of property: Street railway, buildings, plant and equipment; electric lighting, plant and equipment; electric power, plant and equipment; gas, buildings, plant and equipment; water power, plant and equipment	$12,001,911.26
Stores	159,084.46
Accounts receivable	277,135.75
Cash on hand	5,426.67
Conductors' working fund	5,355.00
Winnipeg, Selkirk and Lake Winnipeg Ry. Co.	623,649.69
	$13,072,562.83

LIABILITIES.

Capital stock		$ 5,320,950.00
Bonds, 5%, payable Jan. 1, 1927	$1,000,000.00	
Bonds 5%, payable Jan. 2, 1935	4,000,000.00	
W. S. & L. W. Ry. bond interest and payment guaranteed	400,000.00	
		5,400,000.00
Accounts payable	$ 415,705.65	
Wages for Dec.	48,561.55	
Interest on bonds paid Jan. 2, 1908	125,000.00	
		589,267.20
Car license, due Feb. 1, 1908	$ 3,160.00	
City percentage, due Feb. 1, 1908	43,092.87	
		46,252.87
Unredeemed tickets		3,152.69
Bank of Montreal		701,328.70
Suspense		205,300.74
		$12,266,252.20
Surplus		806,310.63
		$13,072,562.83

PROFIT AND LOSS ACCOUNT.

Balance at credit, Dec. 31, 1906	$ 761,538.73
Less paid on acct. stock dividend	142,100.00
	$ 619,438.73
Net earning	186,871.90
Balance at credit, Dec. 31, 1907	$ 806,310.63

Statistical information: Capital stock, authorized, $6,000,000; subscribed, and paid in, $5,320,950; subscribed and in course of payment, $679,050; gross receipts, $1,722,406.69, increase 1907 over 1906, 21.62%; operating expenses, $775,731.02; increase 1907 over 1906, 10.53%; operating expenses per cent. of earnings, 45.05; net earnings, $946,675.67; increase 1907 over 1906, 30.75%, $232,334.35; fixed charges, $386,667.10; dividends, $373,136.67; surplus for year, $186,871.90; net income per cent. of capital, 12.01; passengers carried, 20,846,317, increase 1907 over 1906, 3,616,763; transfers, 5,954,067; railway earnings per capita, 9.84.

The directors and officers are: President, W. Mackenzie; Vice-President, W. Whyte; Secretary-Treasurer, F. Morton Morse; other directors, Sir Wm. C. Van Horne; D. D. Mann; D. B. Hanna, A. M. Nanton, H. Sutherland, R. J. Mackenzie; Manager, W. Phillips.

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Niagara, St. Catharines and Toronto Ry.

The annual report for the year 1907, presented at the meeting of shareholders Mar. 16, showed liabilities of $2,600,933.50, made up of capital stock, $925,000; first mortgage bonds, railway, $819,000; first mortgage bonds, navigation company, $200,000; current liabilities, $352,224.42; profit and loss, $204,709.08. The assets showed investment account, $2,458,822.50; navigation stock in treasury, $100,000; current assets, $42,111.00.

RECEIPTS.

	1907.
Main Line—	
Passenger earnings	$ 95,517.81
Freight earnings	56,492.51
Express earnings	1,116.91
Sundry earnings	3,687.97
Wesley Park—	
Earnings	34,099.03
Local Line—	
Earnings	21,750.31
Navigation Co.—	
Passenger earnings	28,360.29
Freight earnings	25,157.16
Sundry earnings	1,122.62
Welland division	3,158.64
	$270,463.25

EXPENSES.	1907.
Maintenance of bridges and buildings	$ 16.885.71
Maintenance of locomotive and car department	35,427.92
Maintenance of passenger department	32,004.91
Maintenance of freight department	19 686.78
Maintenance of boat department	35,656.27
Maintenance of power house	12,491.69
General expense	30,949.92
Total operating	$183,103.20
Net earnings from operations	$ 87,360.05
Interest and discount	47,304.00
Surplus for year applicable for dividends	$ 40,056.05

Statistics.—Percentage of operating to total earnings, 67%; passengers carried, 2,267,206; divided as follows: main line, 948,035; local line, 441,004; Wesley Park line, 762,442; Welland line, 31,420; Navigation Co., 84,305.

The freight traffic showed a slight increase notwithstanding the fact that toward the end of the year the financial stringency affected materially some of the heaviest shippers. Freight operation was increased, as at times it was necessary to cut off freight service for two or three days at a time owing to the condition of fills, due to settling. This had the effect of increasing car service cost, also the labor of operation, as to relieve the congestion of cars extra trains had to be run. The passenger business, with the exception of navigation, showed the regular increase. The navigation business fell off owing to the extremely cold and late spring and the general condition of business at the end of the season due to financial reasons. The local line at Niagara Falls shows a falling off in gross earnings, due to the completion of the large works at that point, and the consequent dismissal of hundreds of men engaged on this work who were regular patrons of the line. The slight increase in operating on the main line is due to increased cost of repair material, also the necessity of running extra trips occasioned by the settling of the fills, and slight increase in wages of train men on the sliding scale basis.

All the trestle work has been eliminated between Thorold and Merritton, all wooden bridges replaced with steel, and between Merritton and St. Catharines, with the exception of that section between the Lybster cotton mills and the G.T.R. main line crossing, which is subject to Government permission, which permission is now under Government consideration. There are also some steel girders to be put in at the Lincoln paper mill over the raceway, which are ready, and will be put in the first thing in the spring.

The line from Fonthill to the Welland River is complete with the exception of ballasting and overhead wire. The wire has been ordered, also the ballast. This work will be completed as soon as the snow disappears. Options are in hand from the Welland River to the Toronto, Hamilton and Buffalo Ry. crossing, some of which have been closed, and the engineer has an estimate for the crossing of the Welland River. Options are also in hand for the line from St. Catharines to Niagara-on-the-Lake.

The 1,000 h.p. rotary sub-station at Thorold has been built, completely equipped, and is now in operation. The Merritton plant is being turned over to the Willson Carbide Co. as per terms of agreement. With the present arrangement the power is very much increased, and very much better both in quality and distribution.

The steamers Lakeside and Garden City will only need the usual spring repairs to put them in first-class condition for the season's use.

Following are the officers and directors for the current year: President, F. Nicholls; Vice-President, E. R. Wood; Directors, D. D. Mann, Z. A. Lash, H. G. Nicholls, Æmilius Jarvis and C. E. A. Goldman.

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Projects, Construction and Betterments.

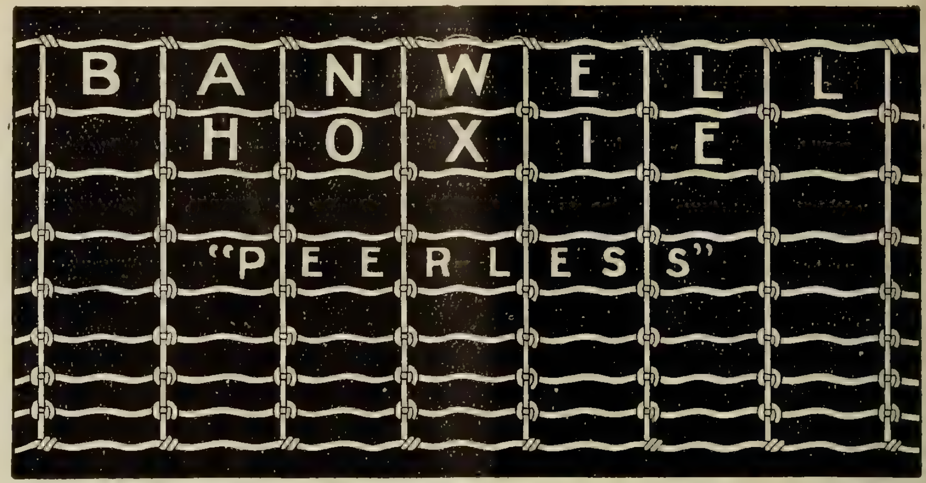
Berlin and Bridgeport Electric St. Ry.—Extensions are under consideration by which the line will run through Bloomingdale, New Germany, Conestoga, Winterbourne and West Montrose, to connect with the C.P.R. Guelph and Goderich line.

Brantford and Hamilton Ry.—It is not expected that the electric railway connecting these cities will be opened for traffic until May 24. The line is reported to be practically completed, and the ballasting, etc., will be completed at once. The terminus in Brantford will be at Cockshutt bridge. (Feb., pg. 121.)

British Columbia Electric Ry.—During 1907, in addition to extensions to track amounting to 9.8 miles, several miles of track in Vancouver have had the old 40-lb. rails replaced by 60-lb. rails, and on the Victoria branch lines, with 56-lb. rails. It is proposed to undertake, during the current year, extensions totalling 80 miles, including the Westminster-Chilliwack line of 56 miles.

Brockville, Ont.—A proposal is being considered to construct an electric railway between Brockville and Prescott, 16 miles, together with a street railway through Brockville. Included in the scheme is a summer park, which it is proposed to construct halfway between Brockville and Prescott. J. B. Gaughn, Brockville, is the prime mover in the proposal.

Calgary St. Ry.—The special committee of the city council appointed to consider the question of a street railway recently reported that, in the committee's opinion,



PEERLESS WOVEN WIRE FENCING

Made from uniformly heavy hard steel wire, well galvanized.
Made in large rolls ready to stretch up.
Requires but few posts; costs very little to erect.
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Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00 " "
Map No. 5—South-Western Alberta	8.00 to 15.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00 to 25.00 per acre.

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"	"	10.00	"	"	239.70	"	"	"	81.62	"	" 200.00
"	"	11.00	"	"	263.60	"	"	"	89.78	"	" 220.00
"	"	12.00	"	"	287.60	"	"	"	97.96	"	" 240.00
"	"	13.00	"	"	311.55	"	"	"	106.10	"	" 260.00
"	"	14.00	"	"	335.60	"	"	"	114.32	"	" 280.00
	"	15.00	"	"	359.50	"	"	"	122 44	"	" 300.00

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the city was not prepared, at present, to undertake such construction, and requested authority to invite proposals to April 15 from private companies. (Feb., pg. 121.)

Dunnville, Wellandport and Beamsville Ry.—Arrangements are said to have been made for the financing of this projected line by a firm of bankers in Philadelphia, Pa. The provisional directors of the company are: President, J. A. Ross, Vice-President, F. R. Lalor, M.P.; G. R. Smith, T. Marshall, P. I. Edgcombe, M. P. Parry, F. J. Ramsay, E. E. Anderson; Secretary, W. J. Aikins.

The company is said to be prepared to submit proposals to the municipalities through which its projected line will run, and it is stated that construction will be commenced from Dunnville to St. Ann, 16 miles, this year.

An extension of two years within which to undertake the construction of this line was granted, Mar. 26, by the Ontario Legislature. (Jan., pg. 47.)

Guelph Radial Ry.—Application has been made to the Ontario Legislature for an extension of the time in which to complete construction of several authorized branch lines. The application was, later recast to provide that the work must be completed within five years instead of seven years as in the original bill. This means that construction must be completed by 1913. Amendments were also added to the bill, to provide that the company must obtain the consent of any municipality before constructing and operating any lines within its boundaries. (Feb., pg. 121, and Jan., 1907, pg. 45.)

London Street Ry.—A by-law has been prepared to carry out an agreement arrived at between the company and the city council by which the company will be permitted to use T rails in relaying part of its tracks on Dundas st., London, Ont. (Feb., pg. 121.)

Longueuil Tramway Co.—Application is being made at the current session of the Quebec Legislature for an act extending the time within which the projected lines may be constructed. H. St. Mars is Secretary of the company.

Montreal Park and Island Ry.—It has been decided to construct an extension of about a mile along the Upper Lachine Road, so as to give the residents of the Westmount plateau better connection with the city. (Mar., pg. 203.)

Montreal St. Ry.—We are advised that the company has completed the purchase of the right-of-way from the present terminus of the Back River Line, to a point opposite St. Vincent de Paul, about 2.55 miles, but it is not likely that construction of this line will be undertaken this year.

Morrisburg Electric Ry.—Application is being made at the current session of the Ontario Legislature for an act to incorporate a company to construct and operate a system of electric railways from Morrisburg, through Williamsburgh, Winchester, Chesterville, Morewood to Russell, and a branch line to Winchester village. Power is also sought to construct and operate telegraph and telephone, power and lighting lines in connection with the railway, and to own and operate hotels, sanitariums, and vessels to run in connection with the railway. I. Hilliard, Morrisburg, Ont., is solicitor for the company.

The Mount McKay and Kakabeka Falls Ry. Co.'s bill in respect to its powers, was before the Ontario Legislature Mar. 19, when the clause relating to the exemption of taxation for 21 years by Neebing township was struck out and the bill reported. It is stated, however, that the township council has power to re-enact this clause without appeal to the Legislature. (Feb., pg. 121.)

Niagara, St. Catharines and Toronto Ry.—The bill before the House of Commons, providing for the extension of this railway company's lines to Hamilton and Toronto, was passed Mar. 16, with the addition of two restrictive clauses, prohibiting the company from doing a street railway business, and from running on any highway or public place within any municipality, without the consent of such municipality expressed by by-law. The N., St. C. and T. Ry. is operated under a Dominion charter, and is empowered to use steam and electricity as a motive power.

Nipissing Central Electric Ry.—Representatives of the various municipalities which have been asked to grant franchises for the proposed electric railway in the Cobalt district, met at Haileybury, Ont., recently to consider the form the franchise should take. The company will not pay for a right-of-way except in places where private property is crossed, but has waived the claim of exemption from taxation. The agreement provides that work shall be commenced by July 1, and that the first five miles must be completed within one year. The first section to be undertaken is between Cobalt and Haileybury. The company gives a bond of $1,000 to each municipality, which will be forfeited if work to that amount is not completed within a year from the date of commencement. The meeting was generally in favor of giving the company every assistance.

North Midland Ry.—A. E. Welch appeared before the St. Mary's, Ont., Town Council recently in connection with the passing of a by-law granting a franchise in that town. The company wanted a franchise of 25 years, with an automatic extension for a further period, as they could not go to Great Britain and sell bonds to run for a less period than 40 years. Power was desired to operate lines on Water St., Queen St. west, and Wellington St., and the company was willing to consider the question of the rebuilding jointly of the Wellington St. bridge. The question was fully considered by the council at a special meeting held Mar. 2, when the by-law was passed. The Ontario Legislature has passed through committee a bill granting the company an extension of time for the construction of its projected line, with the proviso that at least 15% of its $1,000,000 capital must be expended within a specified period. (Mar., pg. 203.)

Ontario West Shore Electric Railway.—The application for an extension of the time in which to undertake construction of the proposed lines, and for confirmation of the bonus by-laws passed by various municipalities through which the line is to run, was before the Ontario Legislature, Mar. 26, and ordered to stand over, to permit of the bill being put in legal form. (Mar. pg., 203)

Quebec and Saguenay Ry.—A press report states that a syndicate has been formed, with a capital of $5,000,000, to construct an electric railway from Ste. Anne de Beaupre to Tadousac, Que., a distance of 120 miles. R. Forget, M.P., is interested in the scheme, and we are advised that there is a probability of the matter being taken in hand in the near future. (Mar., pg. 203.)

Southwestern Traction Co.—An extension of two years, within which the company is to commence construction of its extensions of track, was granted by the Ontario Legislature, Mar. 10. It is understood that construction on the lines to Delaware and Ingersoll will be commenced during the year, and that the extension to Aylmer will be considered later. (Mar., pg. 203.)

Toronto Ry.—Application is being made at the current session of the Ontario Legislature by the Toronto City Council for an act providing among other things for an amendment of the act relating to the Toronto Ry., so that in case "of the company refusing to lay down and operate new lines, as provided in the conditions attached to the agreement between the company and the city, the city may lay down and operate such new lines; and also to provide that the city may construct and operate lines of street railway in the territory added to the city since the date of the agreement with the company." (Jan., pg. 47.)

Upper Columbia Tramway Co.—It is proposed to make application under the British Columbia Tramway Company Incorporation Act and the acts amending the same, for the incorporation of a company with this title to construct a single or double-track railway or tramway with the necessary branch lines, side tracks, etc., throughout the district of East Kootenay, the general route to be as follows: Commencing at or about the south-east corner of lot 21, group 1, Kootenay district, on the west shore of Windermere Lake; thence along the course of Johnson Creek to Brady Creek, and thence along the course of Brady Creek through the north end of block C, in lot 4,596, and lot 27, and from the junction of Johnson Creek with Brady Creek south-easterly to the south end of block D, lot 4,596. The applicants are Jas. McCormack, C. E. Ways, and A. C. Underhill.

Western Central Ry.—An extension of two years within which to commence construction of the proposed line between London and Toronto, via Guelph, was granted by the Ontario Legislature Mar. 19. It is provided that $250,000 must be expended on construction work within that period. The clause in the bill to empower the company to engage in the businesses of navigation, park, hotel, elevator, warehouse, and express companies was struck out. Five years are now allowed for the completion of the road. C. B. Smith, Toronto, is the company's engineer. (Feb., pg. 121.)

Windsor, Chatham and London Ry.—An application for an extension of time within which the railway is to be constructed and completed was granted by the House of Commons Mar. 17. A Dominion charter was granted the company in 1906, empowering it to construct a railway from Windsor to Chatham, and thence to London, Ont., with power to operate telegraph and telephone lines, and to make agreements for the operation of the line and for other purposes with the G.T.R., the C.P.R., the Lake Erie and Detroit River Ry., the Canada Southern Ry., and the Windsor, Essex and Lake Shore Rapid Ry. The provisional directors named in the bill are: J. and W. T. Piggott, W. E. McKeough, Chatham, Ont.; J. Brien, Essex, Ont.; W. C. Crawford, W. J. Moffatt, Tilbury, Ont.; T. E. Robinson, Detroit, Mich., and E. A. Tennis, Philadelphia, Pa. (Aug., 1906, pg. 457.)

Windsor, Essex and Lake Shore Rapid Ry.—The line between Windsor and Kingsville is complete and in operation, and it is expected that the extension to Leamington will be in operation by May 1.

Winnipeg Electric St. Ry.—The Winnipeg City Council has laid over for further consideration a proposal to strengthen the buttresses and place a new superstructure on the Main St. bridge so as to permit the laying of a double track for the street railway. (Jan., pg. 47.)

Electric Ry. Finance, Meetings, Etc.

Fort William, Ont.—The city councils of Fort William and Port Arthur have arrived at an agreement by which the tracks of the Port Arthur St. Ry. within the Fort William boundaries shall be purchased by Fort William, together with half of the rolling stock. The amount to be paid for the track is based on the estimated profits for five years of that portion of the road. Operation of the system will be controlled by a joint commission consisting of two members from each city, a fifth member being the mayor of each city acting in alternate years. It is understood that the line will be double-tracked throughout; and power furnished by Port Arthur. (Feb., pg. 121.)

Halifax Electric Tramway Co.—Traffic receipts for Feb., $12,272.37, against $10,912.08 for Feb., 1907. Receipts for 2 months ended Feb. 29, $25,192.46, against $23,299.84 for same period, 1907.

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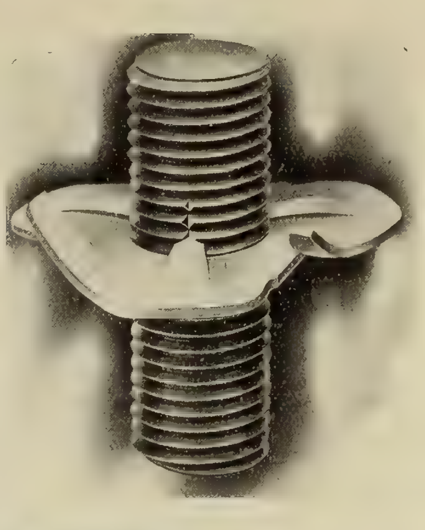

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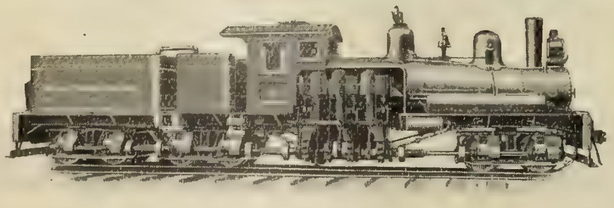

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of 6 % per annum, payable April 1, has been declared.

Hamilton, Grimsby and Beamsville Electric Ry.—It is reported that the Dominion Power and Transmission Co. has purchased the stock of the minority shareholders in the H.G. and B.E.R. Co., exchanging therefor D.P. and T. Co.'s stock. The control of the railway is thus secured by the Power Co.

Hamilton Radial Ry.—The bill granting a Dominion charter to the H.R.Ry. has been passed by the House of Commons. Several amendments which were proposed with a view of protecting the rights of municipalities and the Provincial Governments were defeated. The Minister of Railways stated that in the Government bill respecting the Railway Commission a section would be inserted providing for the specific performance of contracts. (Jan., pg. 47).

Hamilton Street Ry.—Negotiations have been proceeding for some time between the company and a committee of the Hamilton City Council, and it was reported Mar. 8, that it was probable a new agreement will be made with the company. The committee offered to give the company a reduction of from 8 to 5 % on all receipts over $316,000, and some other concessions, in return for which the company would reconstruct the line. It was stated March 20, that the negotiations were likely to fall through. The city offers to reduce the amount of its percentage from 8 to 5 % on all earnings over $316,000, the amount earned last year. Col. Gibson proposes that the city take 8 % on $316,000 for the next three years as its share, and 4 % on earnings over that amount after three years, till the end of the contract term.

Montreal St. Ry.—Passenger earnings for Feb., $265,179.10; miscellaneous earnings, $5,045.53; total, $270,224.43; operating expenses, $201,449.05; net earnings, $68,773.38; city percentage on earnings, $14,567.24; interest on bonds and loans, $17,935.96; contingent for renewals, $13,258.95; rent leased lines, $444.43; surplus, $22,568.80; against, $238,250.89 passenger earnings; $5,217.03 miscellaneous earnings; $243,467.94 total; $182,273.08 operating expenses; $61,192.86 net earnings; $12,600.14 city percentage on earnings; $11,379.92 interest on bonds and loans; $12,173.40 contingent for renewals; $339.96 rent leased lines; $24,699.44 surplus for Feb., 1907. Total earnings for 5 months ended Feb. 29, $1,458,462.81; operating expenses, $943,475.93; net earnings, $514,986.88; city percentage on earnings, $61,661.35; fixed charges, $158,363.20; surplus, $294,962.33; against $1,327,460.38 total earnings; $888,195.68 operating expenses; $439,264.70 net earnings; $53,311.64 city percentage on earnings; $142,355.14 fixed charges; and $243,597.92 surplus for same period 1906-07.

Mount McKay and Kakabeka Falls Electric Ry.—The bill recently passed by the Ontario Legislature confirms the Neebing tp. by-law, to guarantee the company's bonds to the extent of $10,000 a mile for the 4 miles of the route through the township.

Nelson City, B.C.—An act has been passed at the current session of the British Columbia Legislature to enable the corporation of the city to borrow $85,000 for electric light and power purposes.

New Westminster-Vancouver Tramway Co.—Judgment has been given in the British Columbia Courts in the action of Jenns against the executors of David Oppenheimer. The defendants obtained a verdict of $50,000 from H. R. Sperling, R. M. Horn-Payne and R. W. Garbutt, in connection with the sale of the New Westminster-Vancouver Tramway Co., and Jenns, a shareholder, sued on his own account and on behalf of other shareholders for an accounting. The court finds that the plaintiff is entitled to a declaration that the money received was on account of the N.W.-V.T. Co., and to an order that it be paid into court to abide the result of the reference.

The Suburban Tramway and Power Co. is applying at the current session of the Quebec Legislature for an act authorizing an increase of the capital stock of the company.

Toronto Ry.—Car earnings for Feb., $260,834.50, against $233,860.52 for Feb., 1907. Earnings for 2 months ended Feb. 29, $530,159.79, against $488,673.04 for same period 1907.

Windsor, Essex and Lake Shore Rapid Ry.—At a special meeting of shareholders, Mar. 4, the following officers and directors were elected for the current year: President, J. Piggott, Chatham, Ont.; Vice-President, W. C. Crawford, Tilbury, Ont.; Second Vice-President, C. Magee, Ottawa; other directors, J. W. McColl, Hon. E. G. Stevenson, Toronto; Secretary, W. T. Piggott; Treasurer, W. R. Phillimore, Chatham, Ont.

Electric Railway Notes.

We are advised that the Ottawa Electric Ry. has not yet decided to operate pay-as-you-enter cars.

A. J. Ferguson, Montreal, was elected a director of the Detroit United Railways, at the adjourned meeting held Mar. 18.

D. A. Gordon has been appointed general manager of the Chatham, Wallaceburg and Lake Erie Ry., vice G. Fielder, resigned.

The Southwestern Traction Co., London, Ont., has ordered six interurban cars from the Preston Car and Coach Co., to be delivered May 15.

The Ontario Railway and Municipal Board will sit in Port Arthur, Ont., June 3, to hold an enquiry relative to the application for permission to run cars on Sundays.

The Ontario Legislature has approved of a bill of the town of Niagara Falls, by which the assessment of the Suspension Bridge Company is fixed at $150,000 for a period of ten years.

The Winnipeg St. Ry. employes have met to discuss questions regarding the renewal or changing of their wage schedule, which expired with March. It has been stated that increases of pay will be demanded.

The St. Thomas, Ont., St. Ry. authorities have decided to raise the price of tickets from 8 to 7 for 25c., on account of the constantly recurring deficits. Workmen's tickets will remain at 25c. for 10. This line is owned and run by the municipality.

The Ottawa Electric Ry.'s standard passenger tariff C.R.C. 1 has been approved by the Board of Railway Commissioners, relating to rates between the Ottawa city limits and the Experimental Farm, Britannia-on-the-Bay and Rockcliffe rifle range.

The B.C. Electric Ry. is not, as previously reported, experimenting with a new fender on its cars. The company has offered to adopt any fender which the civic authorities may select, provided they thus relieve the company of liability arising from the use of such on the cars.

The British Columbia Electric Ry. proposes to add to its rolling stock during the current year: 4 interurban cars, 2 work cars, and 20 city cars; all of which will be constructed at its own car shops at New Westminster, which will be enlarged to double the present capacity.

The Montreal St. Ry. Co. has submitted an offer to the roads committee of the Montreal City Council that it is prepared to remove the snow in the streets at a maximum cost of $3,000 a mile, the city paying one-half, and providing a dumping ground; the contract to run for 10 years. At present disputes occur annually between the city and the company with respect to the removal of the snow.

W. G. Ross, Managing Director, and D. McDonald, Manager Montreal St. Ry., were in consultation with a committee of the city council Mar. 12, to consider the terms of a by-law to govern the carriage of freight over the company's street lines. It is stated that though no decision was arrived at, there is every prospect of a satisfactory working agreement being reached, and that the service will be commenced at an early date.

The British Columbia Legislature has before it a bill to amend the Municipal Clauses Act in a number of details, including: the addition of a new section, 242B, providing that any municipal council may with the assent of the electors as provided by section 75, "construct, maintain and operate lines of rails and street railways, and dispose of, lease, alienate or grant running rights over the same." Another new section, 242C, provides that no person, existing or future corporation shall obtain a prescriptive right on streets or highways, by reason of any possession or occupation of land forming part of such street or highway.

Hon. Col. Matheson, Provincial Treasurer, and Hon. J. S. Hendrie received a deputation from the Canadian Street Railway Association, Mar. 6, to hear arguments against the proposal in the Supplementary Revenue Act, now before the Ontario Legislature, to increase the taxes on suburban and interurban electric railways by some 50%. The deputation consisted of R. J. Fleming, General Manager Toronto Ry.; J. Anderson, Manager Sandwich, Windsor and Amherstburg Ry.; A. H. Royce, President Toronto Suburban Ry., and Counsel for the Association; C. L. Wilson, Assistant Manager Toronto and York Radial Ry.; C. B. King, Manager London St. Ry.; C. H. Ivey, Solicitor, London St. Ry.; D. J. McIntosh, Accountant Niagara, St. Catharines and Toronto Ry.; and Acton Burrows, Secretary of the Association, and Managing Director RAILWAY AND MARINE WORLD. They particularly urged the point that there be no increase in the taxation of suburban and interurban lines, which it is claimed are with two or three exceptions by no means paying investments at present.

Electric Railway Statistics.

The statistical information collected by the Department of Railways shows that for the year ended June 30, 1907, the paid-up capital of the electric railways of the Dominion was increased by $11,337,505, bringing the total amount to $75,195,475. The mileage, however, remained almost stationary, 814.52. The gross earnings, $12,630,430, show an increase of $1,663,558; and the operating expenses, $7,737,251, show an increase of $1,062,214. The percentage of expenses to gross earnings was 61.25, which is regarded as highly encouraging. The net earnings were $4,971,624. The total number of passengers carried was 273,999,404, an increase of 36,344,330 over the number carried in 1905-06. The record of accidents for the year, adds the report, is distressing. The killing of 71 persons and the injuring of 1,736 others reveals the sacrifice which would appear to be inseparable from the operation of electric railways. The danger is manifestly in proportion to the number of cars run and the population served thereby, since out of 71 fatal accidents 22 took place in Montreal and 20 in Toronto. Singularly, however, not a single passenger was killed in Montreal, while nine lost their lives in Toronto. Of the 1,736 non-fatal accidents, many of which were of a minor character, 490 occurred in Montreal and 696 in Toronto. A comparative table shows that while but one passenger in every 40,311,552 was killed in 1901 it was reduced to one in 6,782,243 in 1905, and in 1906-07 it stood at one in 10,188,126. The average for the seven years was one in 18,268,306.

A special effort was made during the year to ascertain the total amount of capital invested in the construction and equipment of electric railways in Canada, but the difficulties were for the time being insurmountable. The returns received showed a total cost of roads and rolling stock amounting to $52,399,818; but it was not practicable to obtain reliable figures with respect to the primary outlay on seven systems which were either in process of construction or had been purchased at forced sale. A careful estimate was made of the probable investment in connection with these lines, and it was put down at not less than $13,000-000. This would bring the total up to more than $65,000,000. During the current year it is hoped that a complete and accurate statement may be made up.

A special schedule was issued having as its object the gathering of authentic data in relation to the employes and equipment of electric railways. This information was not hitherto available, and practically complete returns have been received. When tabulated the answers gave the following interesting results: Staff officers, 190; clerks, 483; conductors, 2,394; motormen, 2,252; other employes, 3,712; total employes, 9,031; total pay list, $5,291,585. It will be seen that the total pay list represents 68.26% of the total operating expenses. With respect to equipment, it was ascertained that 207 cars were added during the year, of which 162 were of Canadian manufacture. Of all the rolling stock in use 75.50% was found to have been produced in the Dominion.

Following are comparative statistics for 1901, when the collecting of information was started, and for 1907:

	1901.	1907.
Total mileage	*674.58	814.52
Paid-up capital	$39,076,018	$73,567,795
Gross earnings	$5,768,283	$12,630,430
Net earnings	$2,333,120	$ 4,971,624
Earnings.—passenger traffic	$5,529,687	$12,013,421
" freight "	$95,082	$344,367
" mails and expr's	$33,135	$41,951
" other sources	$110,377	$233,190
Total operating expenses	$3,435,162	$7,737 251
Maintenance of way and buildings	$310,892	$765,684
Cost of motive power	$502,101	$1,412,358
Maintenance of cars	$322,700	$1,060,783
General and oper't'g charges	$2,299,468	$4,498,424
Total car mileage	31,750,754	53,361,227
Passengers carried	120,934,656	273,999,404
Tons of freight carried	287,926	479,731

*Improperly included, double track and sidings.

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F. E. Cox, Middleton, N.S., read a paper recently at a meeting of the Nova Scotia Press Association on Government ownership of the Dominion Atlantic and other N.S. railways.

G. S. Cantlie, Superintendent C.P.R. Car Service Department, Montreal, reported recently that there has been a marked increase in the demand throughout the Dominion for cars for the movement of freight. There has been an unprecedented movement of wheat from the head of the lakes to St. John, N.B., over 7,000,000 bush. having been hauled over the rail route so far this season, against about 4,000,000 bushels for the same period 1906-07.

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Montreal—Quebec—Liverpool
Montreal to Avonmouth Docks
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LEYLAND LINE
Boston—Liverpool
Sailing from Boston Wednesdays.

RED STAR LINE
New York—Dover—Antwerp
Sailing from New York Saturdays.

WHITE STAR LINE
New York—Liverpool—Queenstown—
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N.Y.—Plymouth—Cherbourg—Southampton
Sailing from New York Wednesdays.
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Grain Elevator Notes.

The Goderich, Ont., elevator is being enlarged to a million bushel capacity.

The Vancouver, B.C., Board of Trade favors the proposal to construct a public elevator at Vancouver.

J. Callard has been appointed Superintendent C.P.R. elevators, Owen Sound, Ont., in succession to J. H. McQueen, deceased.

J. Fisher, representing the British Consolidated Mills Co., London, Eng., who has been visiting Manitoba recently, expressed himself as in favor of the proposal to build 60 elevators in the west during the ensuing summer.

The Maple Leaf Flour Mills Co., whose mill at Kenora, Ont., was recently destroyed by fire, will commence re-erection at an early date. A by-law granting the company an exemption from taxes was passed there Mar. 13.

The Wheat City Flour Mills Co.'s business has been taken over by G. McCulloch & Sons, Souris, Man., and the complications in connection with the operations of the company's elevator at Brandon, Man., have been straightened out.

T. S. Matheson, heretofore Travelling Superintendent Winnipeg Elevator Co., has recently acquired the elevators at Caron, Midale, and Stilson, Sask., and Arrow River, Man., on the C.P.R., and is arranging to construct two additional elevators at points in the same vicinity.

A deputation from the Manitoba Grain Growers' Association recently waited on the Provincial Premier, to urge the Association's views in favor of Government ownership of internal elevators, and asked for an expression of opinion on the subject. The Premier promised to consider the matter.

The total amount expended upon the construction of the Dominion Government elevator at Port Colborne, Ont., was stated by the Minister of Railways and Canals, in the House of Commons, Mar. 2, to have been $598,700.07, and he added that it was estimated that the further amount required to complete the structure would be $151,299.93.

Fort William grain dealers have forwarded complaints to the C.P.R. eastern and western headquarters at Montreal and Winnipeg, respectively, as to delay in furnishing cars at Fort William for the removal of grain to the seaboard. It is alleged that orders have been placed for 1,700 cars, and that non-fulfilment of these orders has caused a block in the grain trade there, while storage charges often wipe out the dealers' profits.

During Jan. the number of accidents to navigation employes in Canada was eight, 7 of which were fatal. Of the latter, 5 were due to drowning, and 1 each to a fall, and to falling material.

MARINE DEPARTMENT

Admiralty Jurisdiction in Canada.

The following resolution was moved in the House of Commons, Mar. 12, by the Minister of Justice: "That it is expedient to make better provision for the exercise of Admiralty jurisdiction within Canada in accordance with the Colonial Courts of Admiralty Act, 1890; also to provide that by way of compensation for loss of salary or emoluments of office there may be granted to each of the present Judges in Admiralty of the Exchequer Court who had office on Sept. 1, 1907, and to the Marshal of the Quebec Admiralty district an annuity equal to two-thirds of his salary; to the Registrar of the Toronto Admiralty district $1,000; to the Registrar of the Nova Scotia Admiralty district $1,250, and to the Registrar of the New Brunswick Admiralty district $1,500."

Mr. Aylesworth stated that the present system was not satisfactory, and that a bill which would be introduced would take the Admiralty business out of the jurisdiction of the Exchequer Court, which he considered anomalous, and place it within the jurisdiction of the different provincial courts. It was not the intention to interfere with the present court practice, and with the exception of local Admiralty judges in Nova Scotia, Ontario and Quebec, who were not judges of the Superior Court, there would be no changes in the personnel. For the judges mentioned compensation would be provided. There appears to be considerable doubt as to the exact intention of the Government, but taken simply as read, it would imply that so far as Nova Scotia, Quebec and Ontario are concerned, Admiralty cases are to be dealt with in the ordinary courts, which may, or may not, be competent to deal with such special matters as may from time to time arise. A resolution passed at the recent annual meeting of the Dominion Marine Association strongly disapproves of any change in the jurisdiction, procedure or administration of any Canadian Admiralty Court, which may in any way impair the rights, remedies or facilities for relief enjoyed under the present law. The Association also urges that having regard to the nature of the property in dispute and of the questions placed in issue in Admiralty cases, and to the necessity for the preservation of such peculiar rights and requirements as, the action in rem, the right to arrest under warrant by telegram, the release under bond, the preliminary acts in collision cases, and various other items of Admiralty practice, it is essential for the protection and convenience of litigants that a separate procedure be preserved, while the same special attributes and requirements, and the special laws, regulations and maritime customs governing decisions of such cases render specialization desirable on the part of the administrative officers of these courts, as well as in practice and procedure. The Association believes that the rapidly increasing growth of the merchant marine entitles the foregoing views to special attention, and that steps should be taken to extend rather than curtail any rights at present enjoyed. The Montreal Board of Trade, the Shipping Federation of Canada, the Montreal bar, and other bodies, have also memorialized the Government against the proposed change in jurisdiction.

New Steamship for P.E.I. Service.

The ice-breaking, mail and passenger steamer for service between New Brunswick and Prince Edward Island, for which tenders have been invited by the Department of Marine, and which is to be constructed with a view of overcoming the severe winter conditions existing in the Northumberland Straits, will be a vessel of great interest. During his visit to Great Britain and the Continent last summer the Minister, Mr. Brodeur, made extensive enquiries regarding the construction and work of ice-breakers and had many consultations with leading experts there, and the present design has been compiled and completed as the result of these investigations, together with the knowledge based on many years' experience of the officers of the Marine Department navigating Northumberland Straits during the winter.

The principal dimensions of the vessel are: Length b.p., 250 ft., breadth, moulded, 46 ft.; depth, moulded, 27 ft. The indicated h.p. is 6,000, and it is estimated that this power will enable the vessel to reach a speed in open water of about 17 knots. The form of the vessel is specially designed to withstand ice pressure. Longitudinally the lines show ample curvature due to the great beam, whilst vertically the sides are angled from above the water line to the bilge so that when under pressure the vessel will always have a distinct tendency to free herself, and thereby reduce to a minimum the possibility of local distortion. The general structure is of great strength. The framing amidships and approaching the ends forward and aft is of heavy channel section spaced 18 ins. apart. At the extreme ends of the ship, where excessive flanging is necessary, the channel framing is substituted with massive angle frame and reverse frame spaced 15 ins. apart. There are nine transverse watertight bulkheads and special consideration has been given to the strengthening of these, especially at the fore end of the vessel, where the greatest shocks are experienced. The whole transverse framing is bound inside in every way practicable, thus forming a complete structure in itself independent of the outer plating.

There are three steel decks, and an inner bottom, which extends from the trimming tank forward to the trimming tank aft. The outer or shell plating is of Siemens-Martin ship steel. At the waterline of the vessel and running fore and aft a special belt of plating is fitted 8 ft. deep and 1 in. thick. Forward from the bottom of this belt to the keel plate and extending aft for about 85 ft. the plating is 1 in. thick, whilst at the after end in the vicinity of the ice-breaking waterline the plating is ⅞ ins. thick. The shell with its internal framing forms a complete structure capable of ensuring a very high standard of resistance to pressure on every square foot of the hull. The construction in way of the rudder is designed for the purpose of forming the best possible protection to the rudder. The latter is placed about 10 ft. below the waterline, the upper portion forming a false rudder, the line of shell plating being carried to the after end of the casting for this purpose. As previously indicated the watertight subdivision is very complete. Below the main deck there are about 30 watertight compartments in all, so that, should the vessel become bilged there, little damage will be caused through the flooding of any one compartment. All the watertight doors below this deck are operated on a patent system actuated by the usual lever from the navigating position in the wheelhouse. By the fitting of this system all the doors may be closed in the short time of 30 seconds. Large trimming tanks are provided forward and aft, connected by a main drain similar to that fitted in warships and operated by a powerful ballast pump of the centrifugal type situated in the engine room, for changing trim during ice-working operations.

The accommodation has been specially designed to give every comfort to passengers during crossings. Cabins are provided on the upper deck for about 60 first-class passengers in one, two, three and four-berth rooms. The dining saloon and pantry is situated forward of the accommodation, and is capable of seating the full complement. On the promenade deck, which is reached by internal stairways, are the deck, saloon, smokeroom and special cabins, whilst on the boat deck over is the captain and officers' quarters. On the main deck aft accommodation is provided for 20 second-class passengers, engineers, stewards, etc., whilst forward the crew, firemen and petty officers are berthed. Between these quarters the whole main deck is reserved for cargo and coaling operations, to which special consideration has been given in order to meet the special requirements at the different ports of call and departure. The vessel is fitted throughout with an extensive system of steam heating, is electrically lighted and provided with a powerful searchlight of 25,000 c.p. The deck machinery consists of the usual steam windlass, winches, capstan and steering gear.

The propelling machinery of this vessel consists of two sets of triple expansion engines capable of developing a collective indicated horse-power of not less than 6,000. All the machinery is specially constructed with a view to withstanding the great strains thrown upon the working parts when the vessel is working at full power in the ice, these parts being from 25 to 50% in excess of Lloyd's and the Board of Trade requirement. The pumping arrangements are of a very complete description, and are specially designed for the service. There are two large centrifugal pumping engines which draw from the usual sea inlets, and a special connection is made to an inlet at the aft end of engine room in the event of the usual inlet being broken. These pumps are also connected to the main drain running between the trimming tanks. The ballast pump, which is of centrifugal type and capable of delivering about 300 tons of water per hour, has the usual sea connections and is also connected to the trimming tanks forward and aft through the main drain. This pump is used for changing the trim of the vessel during ice-working operations. The other machinery in the vessel includes the general service donkey pump, an independent air pump, independent bilge and sanitary pumps, fresh water service pump, two feed pumps, feed heater, and an evaporator capable of supplying 30 tons of water per 24 hours. The two dynamos and engines are situated in the engine-room and are of the enclosed type fitted with forced lubrication. The propeller blades and bosses are of cast steel and of great strength, and are calculated to be brought up standing without breaking when running at full power. The vessel is fitted with two double-ended and two single-ended cylindrical boilers working under forced draught. The boilers are 14 ft. 10 ins. mean diameter, and are fitted with Morison patent withdrawable furnaces. They are constructed to Lloyd's requirements and Board of Trade rules, and capable of standing a working pressure of 180 lbs. per square inch. Each stokehold is fitted with the usual steam and hand ash hoist, and also an installation of patent ash expellers. The total bunker capacity is about 500 tons.

From the above it will be seen that the ice-breaker to be constructed for the P.E.I. winter service is of enormous strength and great power, and whilst great attention has been given to the structure and machinery, the equipments of the ship also are such as the demands of the service require.

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The All-Red Route.

Hon. C. Sifton, in the House of Commons, Mar. 20, outlined the plan it was proposed to adopt in regard to the projected all British route between Great Britain and the Antipodes, via Canada, as follows: To build or buy steamships, equal in equipment to any on the Atlantic, with a speed of 24 knots an hour. For the Pacific, to have ships of 9,000 tons with a speed of 18 knots. With such a fleet of fast vessels, the time consumed from Liverpool to New Zealand would be: Liverpool to Halifax, 5 days; to Vancouver, 9 days; to New Zealand, 25 days; so that to New Zealand there would be 13 days' gain in the mail service. Australia would not gain any time, because her mails were carried other ways, but this would, at least, be an alternative route. The calculations of the promoters were based on Halifax as a winter, and Quebec as a summer port, but they were not committed to those ports. In distance, Halifax would have the advantage over New York of 541 knots, while by the southern route, Quebec would have an advantage over New York of 393 knots, and 225 knots via Belle Isle. The 24-knot boat would consume 4 days 12 hrs. from Liverpool to Halifax; 4 days 20 hrs. to Quebec via Belle Isle, and 5 days 6 hrs. to Quebec via Cape Race. The Lusitania's time, when she broke the record, was 5 days 18 hrs., though she had reduced this by over an hour; so that the Halifax route would be faster by 1 day 6 hrs. than the New York route. It was not considered necessary to build vessels as large as those of the Lusitania class to secure a speed of 24 knots, and such vessels would be too large for the traffic offering on this route. Regarding questions of fog and ice conditions on the proposed route, Mr. Sifton pointed out that there was less fog off the Canadian coast than off the U.S. coast, and as to ice he had authority for stating that there was little difficulty, and such as there was, could be obviated by a slight deviation to the south during the winter months. As to cost, the conclusion arrived at was that a 24-knot weekly service between Canada and Great Britain, and a fortnightly service between Vancouver and New Zealand and Australia would cost in subsidy £1,000,000 a year. The allocation of this would be as follows: Australia, £75,000; New Zealand, £100,000; Canada, £325,000, and Great Britain, £500,000, or half the entire subsidy. He was convinced that Great Britain only awaited definite conclusions on the part of the countries named to take the project up in a practical way. At present Canada paid in subsidies to Pacific and Atlantic steamship services $680,000 a year, so that the difference between the present and the proposed service would be between $900,000 and $950,000 a year in additional subsidy contribution.

* * *

It has been decided to change the date of the Fulton centenary celebration at New York from Sept. 18 to Sept. 25, 1908.

The Barrington lightship broke from her moorings Mar. 16. She was taken to the Government wharf, Barrington, N.S., and subsequently replaced on her station.

The District Labor Council of Toronto, by a vote Mar. 5, decided to expel the National Association of Marine Engineers from membership. In urging the expulsion of their rivals the delegates from the International Union claimed that they had entered into individual agreements with the steamboat owners in an effort to prevent the signing of an agreement between the employers and the members of the International Union. The subject has been the cause of some friction for a considerable time.

Atlantic and Pacific Ocean Marine.

Capt. McNicoll, of the Allan Line S.S. Victorian, died at Liverpool Mar. 10.

Lord Strathcona will, it is announced, read a paper on the "all red" route, at the Royal Colonial Institute, London, Eng., April 7.

The Allan Line S.S. Hesperian, sister ship to the S.S. Grampian, is scheduled to sail from Great Britain on her maiden voyage, April 25.

Preparations are being made for another attempt to float the wrecked C.P.R. steamship Mount Temple, at Ironbound Island, N.S., as soon as the weather is fit.

The Submarine Signal Co. is installing three experimental bell buoys at points off the Nova Scotia coast, as follows: On the Willson gas buoys, at Sambro island, Egg island, and at Lunenburg.

The International Marine Signal Co., Ottawa, has received an order from the Mersey Dock and Harbor Board, Liverpool, Eng., for one of its automatic acetylene gas buoys, similar to those used in Canadian waters.

The Thomson Line will shortly replace the wrecked S.S. Kildona by a larger and more suitable vessel, but it has not yet been decided whether to purchase or to build. Most probably the latter course will be adopted.

Capt. W. Palmer, a vessel owner of Dorchester, N.B., was an officer on board the S.S. Alcarita, which sailed from Delagoa Bay, South Africa, last Aug., for Hong Kong and Baltimore, and has not since been reported.

Capt. Fraser and J. F. Welch, second officer of the Quebec Steamship Co.'s S.S. Bermudian, have been presented with a testimonial by the Governor of Bermuda, for the rescue of the crew of the four-masted schooner Mary L. Newhall, in Mid-Atlantic, Feb. 3.

The Allan Steamship Line is having eight of its vessels, viz.: Corsican, Grampian, Hesperian, Ionian, Pretorian, Tunisian, Victorian and Virginian, and the Dominion Steamship Line, three of its vessels, viz.: Kensington, Ottawa and Southwark, fitted with submarine signalling apparatus.

The Dominion Steamship Line's S.S. Alberta will, it is stated, be placed in service during the forthcoming season, and her sister ship Albany, in the 1909 season. These two vessels are being installed with a combined motive power of turbines and reciprocating engines, and have a tonnage of 14,000 gross.

The Postmaster-General stated in the British House of Commons, Mar. 12, that the gross revenue collected by the British Post Office on letter and parcel mails dispatched from Great Britain in 1907, by C.P.R. steamers, was £35,500, to which should be added £3,000 for foreign colonial mails, whereas the annual British subsidy was £45,000.

The S.S. Marama was announced to leave Sydney, New South Wales, Mar. 16, on her first voyage to Vancouver, B.C. The new vessel, which is a twin-screw, steel passenger and freight steamship of 6,500 tons, takes the place of the Miowera, which will be put on another run. The Marama is announced to leave Vancouver on the return voyage April 24.

A press report states that the C.P.R. Atlantic Line steamships will not dock at Montreal this season, on account of the congestion existing at that port, accentuated by the work still being executed on the sheds there. Three Rivers is mentioned as the probable terminus, in preference to Quebec, where labor troubles have frequently caused interruptions of work.

The New Boston, Havana and St. John Steamship Co. has applied at Boston, Mass., for a charter to provide a quick freight service between the ports named. Amongst the names mentioned in connection with the company are: D. W. Dryden, Halifax, N.S.; P. Thomson, J. H. Doody, St. John, N.B.; J. W. Wylde, J. E. Doherty, and J. Monseon, of Boston, Mass. It is hoped to commence the service in May.

The Dominion Atlantic Ry. Co.'s S.S. Prince Arthur landed recently at Yarmouth, N.S., the crew of the brig James Daley, wrecked off Florida, Feb. 29; part of the crew of the wrecked schooner M. J. Sumner, and 22 persons from the wrecked Pickford & Black liner Beta. Those rescued from the M. J. Sumner and Beta were wrecked a second time, Mar. 14, when the steamship Silvia went ashore at Vineyard Sound.

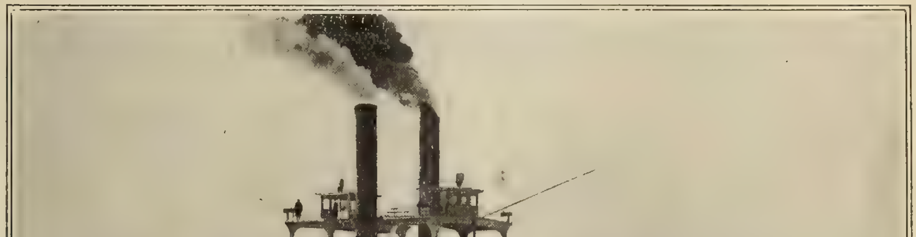
At a mass meeting held in Halifax, N.S., Mar. 13, a resolution was passed that "In the interests of the Empire, the Dominion at large and the Maritime Provinces, this meeting is of the opinion that any contract which may be entered into by the Canadian Government for the payment of a large subsidy for a fast Atlantic service, should stipulate that the Canadian terminus be at a port on the Atlantic seaboard of the Dominion the year round."

Maritime Provinces and Newfoundland.

C. W. Seeley, Halifax, N.S., has been appointed inspector of hulls and steamboat equipment for Nova Scotia.

The Port Hood Coal Co. has chartered the steamers Pors and Thordis for its coal carrying trade during the ensuing season.

It is reported that J. J. Moffatt, Manager of the Bras d'Or Steamship Co., is visiting Great Britain, for the purpose of purchasing a vessel to replace the wrecked steamship Weymouth.



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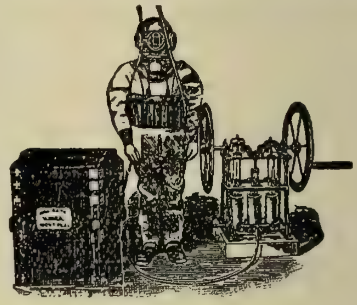

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The Dominion Government steamship Lady Grey returned from her supply trip to the Labrador coast, Mar. 5. The voyage was accomplished without accident, though a landing could not be made at Tadousac, on account of the heavy ice there.

The Red Cross Line steamship Silvia, while on her regular voyage from New York to Halifax, N.S., ran on the rocks at the entrance to Vineyard Sound, Mass., Mar. 14, during a fog, and there is reported to be but little chance of saving her.

The following appointments have been recently announced: J. W. Knowlton, harbor master, Advocate, N.S.; A. Hyson, harbor master, Mahone Bay, N.S.; G. L. McLean, shipping master, Port Hastings, N.S.; E. A. Murray, pilotage commissioner, Pugwash, N.S.

The Island Tug Co., of Charlottetown, P.E.I., is having built at Shelburne, N.S., a twin-screw steamboat of 500 tons gross, and 300 tons register. The vessel, which will be completed and placed in service within a few weeks, has been named Winifred.

It is reported that various shipping companies at St. John, N.B., have entered into an agreement to establish a uniform rate of wages for the ship laborers at that port, at 35c. an hour, and to divide the summer work between the two laborers' societies. The rate last summer was 40c. an hour.

Nova Scotia shipowners and shipbuilders are arranging to hold a conference in Halifax, for the purpose of discussing measures to promote the revival of their branches of the shipping trade. Their conclusions will be placed before the Dominion and Provincial Governments, in the hope that assistance for steel shipbuilding may be granted.

The work of dredging the channel entrance to the St. John, N.B., harbor was commenced Mar. 6, the Dominion Government dredge W. S. Fielding being utilized. Doubts have been expressed as to the suitability of the dredge for the work to be accomplished, and it is stated that to dredge the channel, 500 ft. wide by 30 ft. deep, for the distance required, will take two years.

The Finance Minister of Newfoundland in his budget speech recently referred to the improvement in the fishing and shipbuilding interests of the colony. He said in 1903 there were 14 sailing vessels of 1,504 tons bought abroad for use in Newfoundland, while in 1907, there were 62 vessels of 5,985 tons bought abroad. In 1903, there were built in the island 92 vessels of 3,458 tons, while in 1907, there were 131 vessels of 5,089 tons built.

Application is being made to the New Brunswick Legislature for an act to incorporate the St. John River Steamship Co., with a capital of $48,000, and office at South Bay, N.B. The objects sought include the building or otherwise acquiring and operating of steam and other vessels for the carrying of passengers and merchandise, and for other purposes incidental to a general forwarding business. The provisional directors named in the application are: L. A. Currey, R. K. Jones, and G. R. Vincent, St. John, N.B.

During the financial year ended June 30, 1907, the Newfoundland Government expended $65,000 upon lighthouses, and $77,000 for other services in connection with marine and fisheries interests of the island, in addition to votes for ocean and coastal steamship services made in connection with the post office service. During the past eight years the number of lighthouses and fog alarms has increased from 56 to 96, and the Government proposes, out of balances in hand, to expend about $10,000 in addition to the amounts to be appropriated out of revenue.

An order-in-council passed Mar. 15 proclaims the limits of Port Hastings, N.S., harbor as follows: All the navigable waters of the Gut of Canso and of streams and ponds adjacent thereto, south of a line drawn due south-west from the McMillan point lighthouse, and north of a line drawn due south-west from the extremity of the unnamed point situated 2 miles south-east of McMillan point and east of the mid-channel; and of Port Hawkesbury, N.S., harbor, as follows: all the navigable waters of the Gut of Canso and of streams, ponds, etc., adjacent thereto, south of a line drawn due south-west from the extremity of the unnamed point situated two miles south-east of McMillan point, east of the mid-channel, and north of a line drawn due south-west from the extremity of Madden point.

The Pickford and Black Line steamship Beta, which was wrecked, and became a total loss on Turk's Island recently, was built at Glasgow, Scotland, in 1873, for the Cunard Co.'s West Indian mail service, in which she was engaged by that company up to 1893, when the mail contract was secured by the Pickford and Black Line, which purchased the vessel. The Beta underwent extensive repairs by her makers at Glasgow in 1899, and in 1907 she was generally overhauled at Dartmouth, N.S. She was equipped with triple expansion engines, with cylinders 26 ins., 33¾ ins., and 59 ins., diameter, by 42 in. stroke, 226 n.h.p.; her dimensions were: length, 235.1 ft.; breadth, 28.5 ft.; depth, 22.1 ft.; tonnage, 677 gross. She was valued at $135,000, and the loss is covered by insurance.

Considerable dissatisfaction is expressed by the various coal companies which charter Norwegian vessels for the coast carrying trade with the recent order that after Jan. 1, 1909, the carrying must be done by British vessels. It is stated that Canada has no large coasting vessels, and it would be years before such vessels could be constructed here. The vessels required for this trade are of special design and capacity, and unless they entered into competition with other vessels in other parts of the world, would have to remain idle for six months every year. The statement that the whole of the vessels now utilized in the trade would transfer to the Canadian register during this year is not believed to have any foundation in fact. The argument in favor of the order is that foreign vessels are taking the carrying trade from Canadian vessels and consequently shipbuilding in the Dominion is declining. The Dominion Coal Co., Nova Scotia Steel and Coal Co., Intercolonial Coal Mining Co., and Acadia Coal Co., are the chief companies which will be affected when the order goes into force.

Province of Quebec Marine.

J. DeCaen has been appointed Government wharfinger at Paspebiac, Que.

F. X. Hamelin, Sorel, Que., has been appointed inspector of steamboat boilers and machinery by the Department of Marine.

The Richelieu and Ontario Navigation Co.'s offices at Montreal are to be considerably enlarged and improved, preparatory to the opening of the season.

Notice has been given that the water will be drawn off the Lachine canal April 1, for the execution of repairs, etc., and that it will be readmitted May 1.

A press report states that the C.P.R. has rented about half of the new Government wharf at Quebec from the Harbor Commissioners, thus giving the company 1,000 ft. of wharf frontage.

The Quebec Board of Trade, at a meeting Mar. 17, adopted a resolution favoring the incorporation of a company to undertake contracts for the loading and unloading of vessels at that port.

A notice to mariners was recently issued, warning them of a hitherto uncharted rock near the western entrance to Watagheistic Sound, in the St. Lawrence. It is described as 14 ft. across, at a depth of 12 ft. This was where the Government steamer Montcalm recently came to grief.

G. Bothwell, who operates two steamboats on the Lievre River, has obtained an injunction restraining Shearer, Brown & Wills, Ltd., contractors, Montreal, from proceeding with the work of constructing the piers and substructures of a Government bridge there on the grounds that such construction will seriously interfere with the navigation. Further litigation on the subject is threatened.

Canadian Stewart Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $100,000, and offices at Montreal, to carry on a general engineering and construction business, and in connection therewith to construct or otherwise acquire and operate steam and other vessels. The provisional directors are, C. F. Franson, New York; A. Bissett, J. T. Ostell, F. H. Shaw, D. B. Smith, Montreal.

The National Trading Co., Ltd., has been incorporated under the Quebec Companies Act, with a capital of $500,000 and offices at Montreal, to carry on the general business of contractors and forwarders, and to construct and operate canals, wharves, elevators, steam and other vessels, and tramways, operated by electric or steam power. The provisional directors are: J. P. Mullarkey, J. Rowley, H. J. Smith, C. Lattimore; M. B. McDonnell, Montreal.

The General Construction Co., Ltd., has has been incorporated under the Dominion Companies Act, with a capital of $90,000, and offices at Montreal, to carry on the general business of contractors, and in connection therewith to own dredges, boats, derricks, steamshovels, dockyards, and other contractors' plant. The provisional directors are: E. A. D. Morgan, G. A. Morrison, S. R. Gauthier, L. A. Loiselle, G. C. Tunstall, Montreal.

Ontario and the Great Lakes.

Capt. John Alward, Toronto, has been appointed measuring surveyor of shipping for that port.

The Upper Ottawa Steamboat Co.'s tariff of tolls for the use of its works during 1908 has been approved by the Governor-General-in-Council.

S. D. Andrews, Collingwood, has been appointed inspector of hulls and steamboat equipment for Ontario.

C. D. Sargent, C.E., has been appointed Resident Engineer St. Lawrence canals, with headquarters at Cornwall, Ont.

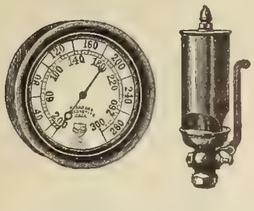
A. S. Gorner has been appointed Manager of the O'Connor Steamboat and Hotel Co., Ltd., Temagami, vice J. Malcolmson.

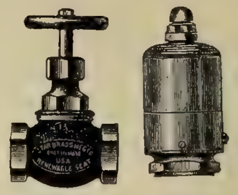
The Public Works Department received tenders recently for the construction of a landing pier at Chute à Blondeau, Ont.

The Department of Marine has established an acetylene gas buoy at the eastern end of Brockville narrows in the River St. Lawrence. The light shown is white, and will be occnlted at short intervals.

D. D. Mann, Vice-President Canadian Northern Ry., is reported as having stated that the ore docks at Key Harbor will be completed and ready for operation by the opening of lake navigation.

A press report states that the Detroit and Cleveland Navigation Co. will probably run





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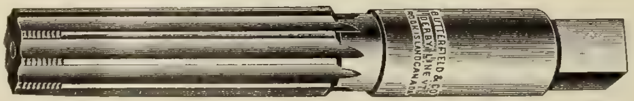

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the steamboat City of New York to Goderich, on a weekly schedule during the season, as a part of its Detroit-Bay City service.

Representatives of the C.P.R. and the Muskoka Lakes Navigation Co. waited on the Ontario Minister of Public Works recently, to request that steps be taken to improve the channels between some of the northern lakes.

A serious cave-in on the Welland Canal occurred Mar. 7, when about 350 ft. of the east bank, about 3 miles south of Welland, Ont., broke away. It is not expected that the opening of navigation on the canal will be delayed.

The Dominion Government will be asked shortly to open a channel in the Detroit River, on the east ride of Fighting Island, to be used for upbound traffic only. At present the one existing channel is used for both up and down bound traffic.

The Montreal and Lake Erie Steamship Co., Ltd., incorporated under the Dominion Companies Act, has been licensed under the act respecting extra-provincial companies to carry on business in Ontario, with A. W. Briggs, Toronto, as its attorney.

A Windsor, Ont., man was recently charged at Detroit, Mich., with unlawfully bringing a Chinese laborer into the U.S., across the dividing river, but the case was dismissed on the ground that a rowboat was not a vessel within the meaning of the act.

The Dominion Government is carrying out an improvement to the navigation of the Winnipeg River at the Throat Rapids, near Kenora, Ont. The work, which includes the removal of a rocky islet in the middle of the river, is expected to be completed by the opening of navigation.

W. J. Pulling and Co., Windsor, Ont., have sold the steam barge Juno to Haney and Miller, Toronto. The Juno was built at Wallaceburg, Ont., in 1885. Her dimensions are: Length, 139.7 ft.; breadth, 26.8 ft.; depth, 8.8 ft.; tonnage, 288 gross, 196 register. She is a screw-driven vessel with engines of 175 n.h.p.

Haney and Miller, Toronto, have purchased the schooner Sligo, which has been transformed into a barge. The vessel was built in 1874, at St. Catharines, Ont., and has made a few trips across the Atlantic. Her dimensions are: Length, 137 ft.; breadth, 23 ft.; depth, 11.8 ft., and her tonnage, 284 registered.

Considerable feeling has been shown by vessel owners on the lakes against the Government proposal to place a duty on repairs to vessels executed in the U.S. ship yards and dry docks. It is held that there are not adequate facilities in Canada for dealing with such work, and such legislation as is suggested would be a great hardship on shipowners.

The Fischer Lumber Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $100,000, and office at Dryden, Ont., to carry on the business of timber and tie merchants, and in connection therewith to build or otherwise acquire, and to operate steam and other vessels. The provisional directors are: M. E. Oxenham, G. M. Wood, and R. V. LeSueur, Sarnia, Ont.

Active preparations are being made at the various lake ports for an early opening of navigation, and in addition to the ordinary annual refittings, the steamboat Canadian is being fitted with new pumps and hoisting gear, the Bickerdike with new bulwarks and stanchions, the Kenora with hoisting gear and alterations to hatches, and the Corunna is having two new boilers installed.

The Dominion Storage and Forwarding Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $40,000, and office at Toronto, to carry on the business of a navigation, transportation, warehousing, wharfinger and forwarding company, and in connection therewith to own and operate vessels, warehouses, docks, elevators, etc. The provisional directors are: F. B. Duffett, N. G. Duffett, J. N. McKendry, C. E. Starr, and J. Donnelly, Toronto.

The Canadian Pacific Car and Passenger Transfer Co.'s car ferry Charles Lyon, built by the Polson Iron Works, Ltd., Toronto, was given her final trial Mar. 20. She was given a run of five hours at full speed, and everything passed off satisfactorily under the charge of Capt. D. H. Lyon, Ogdensburg, President of the owning company. It is understood that she will be placed on the route between Prescott and Ogdensburg about April 1. A description of the vessel was given in our Jan. issue.

St. Joe Island and Sault Line Ltd. has been incorporated under the Ontario Companies Act, with a capital of $40,000, and office at Sault Ste. Marie, Ont., to construct, own, charter and navigate steam and other vessels; to construct and use docks, warehouses, etc., and to carry on the general business of general carrier of passengers and merchandise, and of forwarder, wharfinger, warehouseman and navigation company. The provisional directors are: A. Carney, A. L. Carney, G. G. Farwell, Sault Ste. Marie, Ont.

The question of the construction of a dam across a portion of the St. Lawrence River, near Cornwall, was brought before the House of Commons, Mar. 6, when correspondence relating to the matter was submitted, together with a report made on a similar proposal in 1903, and the protests recently made against the present proposal by the various Canadian associations whose interests would be effected, should the dam be constructed. E. Lafleur and W. J. Stewart, engineers of the Public Works and Marine Departments, respectively, have been associated with the Department of Railways and Canals' engineers to ascertain what effect the proposed construction would have on navigation, but have not yet made their report.

Manitoba, Saskatchewan, Alberta, Etc.

The Wm. Peason Co., Ltd., Winnipeg, has made application for the issue of supplementary letters patent to increase its capital stock from $250,000 to $500,000.

The Dominion Government has purchased the steamer Lady of the Lake, on Lake Winnipeg, paying $8,000 therefor. In giving the information in the House of Commons, the Minister of Marine stated that the vessel had been left at one of the small wharves on the lake, a caretaker at $45 a month being in charge. The Lady of the Lake was built at Selkirk, Man., 1897, and was owned by the Northern Fish Co., Winnipeg, her dimensions being: Length, 105 ft.; breadth, 18.5 ft.; depth, 8.9 ft.; tonnage—201 tons gross, 155 tons register. She is a screw steamer fitted with engines of 13 h.p.

An injunction has been granted against the Pioneer Navigation and Sand Co., restraining it from removing sand or gravel from the bed of the Assiniboine river at Winnipeg, opposite F. L. Patton's property. The Attorney-General of Canada was added as a defendant, and the defence was that the river is a navigable stream, and that the bed and banks were vested in the Crown. The judgment above quoted refers only to the dredging of that part of the river near which plaintiffs' property is situated, and on that part of the case he obtains costs, but pays the Crown's costs on the issue on which he fails.

B.C. and Pacific Coast Marine.

W. B. Shiles has been appointed harbor master at New Westminster.

A scow 100 ft. long, 32 ft. beam, and having a depth of 8 ft., has just been completed at Crane's yard, Lulu Island, Vancouver, B.C.

The C.P.R. steamship Princess Beatrice has been withdrawn from the northern route, and placed on the run between Victoria and Seattle, Wash.

The paddle wheel steamer Hamlin, trading on the Fraser River, between Chilliwack and Vancouver, B.C., is being given a general overhaul at New Westminster.

The Boscowitz Steamship Co.'s steamship Vadso having been repaired and thoroughly overhauled after her recent accident, has resumed service to Port Simpson and northern ports.

The Union Steamship Co.'s steamship Camosun is making weekly trips between Vancouver and Prince Rupert, where passengers for points beyond are transferred to smaller steamers of the same company.

The C.P.R. steamship Princess May has undergone a thorough overhauling, and resumed her service on the northern route Mar. 13, where she is running on a weekly schedule alternately with the Princess Royal.

The Jedway Lumber and Development Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $20,000, with power among other things to construct and operate wharves, docks, steam and other boats, scows and barges.

A press report states that J. W. Troup, Superintendent of the C.P.R. Pacific Coast steamship service, is about to sail for Great Britain in connection with the building of the vessel of the Princess type, by the Fairfield Shipbuilding Co., Glasgow, for the Pacific coast service.

The steamship J. P. Douglas was launched recently at Victoria, and was subsequently towed to Vancouver for the installation of machinery. She has been built for Garvey and Gates, who intend to run her between Chilliwack, Harrison Mills, and Harrison Hot Lake. It is expected she will be on the route during April.

It has been announced that a five-day service will be given, starting early in April, between Victoria, B.C., and San Francisco, Cal., the repairs to the steamboat Queen having been completed. Latterly the service has been a seven-day one, the vessels engaging in the trade being the Umatilla and the City of Pueblo.

The Eastern B.C. Lumber Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $500,000, and power, amongst other things, to build, purchase or otherwise acquire, and operate, steam and other vessels, tramways, logging railways, telegraph and telephone lines, wharves, etc., in connection with its business.

The B.C. Legislature voted the following subsidies at its current session for steamship services: $2,500 for a service on the Columbia River above Revelstoke; $1,500 for a service on North Thompson River; $1,250 for a service on Columbia River above Golden; $1,500 for a service on Duncan River to Healey's Landing or north.

A project for the improvement of the Fraser River from New Westminster, B.C., to the sea is under consideration, and a Cleveland, Ohio, engineer has completed a survey of the route. A report as to the improvements necessary, together with an estimate of the cost, is being prepared, and will be submitted to the Dominion Government on behalf of the city.

The Dominion Carbolineum Works, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $100,000, to carry on the business of lumbermen, and to deal in railroad ties, etc., and in connection therewith to construct, own and operate steam and other vessels, wharves, docks, dry docks, marine railways, etc., and to carry on the business of vessel owners, carriers by land and water, and for the repairing and wrecking of vessels.

The Vancouver civic market and industries committee has had under discussion recently the question of transportation from points on the Fraser River to Vancouver market. Two proposals were received from A. McLean and D. F. Page, each of whom required free wharfage and water facilities and a small subsidy until the service was on a paying basis. The matter of dredging the channel up to the market wharf was also taken up, and it was decided to make representations to the Dominion Government on the subject.

Plans and specifications for the proposed Canadian Government fisheries protection cruiser for the Pacific coast have been filed, and tenders are to be invited at an early date. The total cost is estimated at $400,000. Following are the principal dimensions, etc.: Length, 240 ft.; breadth, 32 ft.; depth, 17 ft.; displacement, 1,400 tons; twin triple-expansion engines with cylinders 20½, 32 and 50½ ins. diam., by 27 ins. stroke, 4,500 i.h.p., boilers, of water tube type, working pressure, 200 lbs.; coal capacity, 300 tons; speed, 19 knots on trial trips. R. L. Newman, Victoria, consulting architect to the Department of Marine, is the designer.

The Canadian Government hydrographic steamer Lillooet was launched recently at Esquimault. Her measurements are: Length, 163 ft. between perpendiculars; breadth, 27 ft.; depth, 15 ft.; displacement, 780 tons, with a coal capacity of 150 tons on a draught of 11 ft. 3 ins. She in a twin-screw steamer, driven by triple-expansion engines with cylinders 11½, 18 and 24 ins. diam. by 24 ins. stroke, at 120 revs., developing about 900 h.p., supplied with steam by two Scotch boilers, 10¼ ft. long by 11½ ft. diam., fitted with forced draught, at a pressure of 180 lbs., at a speed of 11½ knots an hour. A full description of her, with plan, elevation and cross section views, was given in our Oct. and Nov., 1906, issues.

The regulation respecting the coasting trade of Canada, which comes into effect Jan. 1, 1909, has raised the question as to whether the carriage of goods in U.S. vessels from Vancouver to destinations in Yukon, via Skagway, Alaska, would be a breach of the Act. The Pacific Marine Review has taken the question up, and has produced a letter from the Canadian Customs Department, from which the following is an extract: "The carrying of goods by U.S. vessels from Vancouver to Skagway would not appear to be a carrying of goods from one port of Canada to another since the settlement of the Alaska-Yukon boundary. I do not desire, however, to engage in controversy on this subject, as there is no change as yet in the regulations for the shipment of goods from British Columbia ports to the Yukon via Skagway and White Pass."

◆

The U.S. Government statistics of traffic on the Great Lakes for the season of navigation of 1907, show a total of 83,387,919 net tons, an increase of 10% over the figures for 1906. The iron ore shipments, exclusive of 275,000 tons shipped to Canada, were 40,727,972 gross tons. The quantity of wheat carried eastward through the Sault Ste. Marie canals was 98,135,775 bush., and the total traffic through the canals was 45,544,319 net tons.

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Notices to Mariners.

The Dominion Department of Marine has issued the following notices:—

No. 7. Jan. 30.—12. New Brunswick, south coast, Bay of Fundy, off Negro head, submarine fog bells established. 13. Nova Scotia, south coast, submarine bell attached to Sambro gas and whistling buoy. 14. Ireland, south coast, Kinsale head, character of light and fog signal altered.

No. 12. Feb. 13.—26. British Columbia. Juan de Fuca strait approach, Swiftsure bank, gas whistling and bell buoy replaced in position. 27. Queen Charlotte islands, Hecate strait, Skidegate inlet, change in position of Lawn point gas and bell buoy. 28. Japan. Todo-yaki, auxiliary light established. 29. Hiroshima bay, Shiraishi beacon light, characteristic. 30. Ishikari lighthouse, description of light. 31. Kagenojima, change in light.

No. 13. Mar. 3.—32. New Brunswick, south coast, Bay of Fundy, Quaco, temporary light on eastern breakwater pier. 33. Nova Scotia, south coast, Port Hebert, light improved. 34. Nova Scotia, Cape Breton island, south coast, Louisburg harbor, change in characteristic of fog alarm. 35. England, west coast, Bristol channel, Flat Holm island, fog signal established.

No. 14. Mar. 11. 36.—Quebec.—River St. Lawrence, chart, Montreal to Longue Pointe issued. 37. River St. Lawrence, chart, Ste. Emelie to Deschambault, issued.

No. 15. Mar. 12.—38.—Ontario Lighthouse Division.—Quebec, Ottawa River, Allumette lake, Allumette island, Lower Narrows light pole replaced by tower. 39.—Ontario.—Lake Ontario, west end, Burlington channel, south pier damaged, front range lighthouse destroyed, temporary outer range lights on north pier. 40.—Ontario. Lake Simcoe, Fox island, light still maintained.

No. 16. Mar. 14.—41. British Columbia.—Strait of Georgia, Ballenas islands, fog alarm established. 42.—British Columbia, Vancouver island, west coast, Clayoquot sound, Hecate passage, Halftide rock, change in position of buoy.

No. 17. Mar. 17.—43. Ontario Lighthouse Division.—Quebec, River St. Lawrence, Lake St. Louis, above St. Bernard or Nun's island, gas buoy established. 44. Ontario, Lake Ontario, Bay of Quinte, Trenton, gas buoy established. 45. Ontario, Lake Huron, Goderich, gas buoy to be established south of damaged breakwater off entrance to harbor

No. 18. Mar. 17.—46. British Columbia, Vancouver island, east coast, Stuart channel, Oyster harbor entrance, Coffin islet, Wigham light replaced by gas-lighted beacon. 47. British Columbia, Vancouver island, east coast, Nanaimo harbor, Gallows point gas-lighted beacon. 48. British Columbia, Strait of Georgia, off Sechelt peninsula, White islet, Wigham light replaced by gas-lighted beacon. 49. British Columbia, Strait of Georgia, Malaspina strait, Lund, Ragged islands, Wigham light replaced by gas-lighted beacon.

No. 19. Mar. 20.—50. Ontario Lighthouse Division—Quebec, Ottawa river, Lake of Two Mountains, Graham, change in color of lights, back range light raised. 51. Ontario—River St. Clair, Stag island shoal light carried away, temporary float light. 52. Ontario—Lake Nipissing, off mouth of Sturgeon river, dredged channel, gas buoy established.

No. 20. Mar. 21.—Quebec—53. River St. Lawrence, ship channel between Quebec and Montreal, Nicolet, range lights established. 54—Quebec. River St. Lawrence, ship channel between Quebec and Montreal, Nicolet traverse, gas buoys established.

The following notices have been issued by the U.S. hydrographic office:

No. 11. Mar. 14.—405. Niagara river, Strawberry island channel, range lights established.

Coast, Lake and River Officers for 1908.

The following appointments have been made by navigation companies engaged in the coast, lake and river routes for their various steam and sailing vessels, tugs and barges for the current year. In the first column is given the name of the vessel, in the second that of the captain, and in the third, that of the chief engineer:

ALGOMA CENTRAL STEAMSHIP CO., SAULT STE. MARIE, ONT.

Agawa	W. C. Jordan	J. L. Smith
John J. Barlum (bge.)	C. Staley	
King Edward	W. Bemrose	G. Sylvester
Leafield	F. J. Davis	J. Cameron
Paliki	R. H. Boyle	W. Harmon

BOSCOWITZ STEAMSHIP CO., VICTORIA, B.C.

Vadso	B. L. Johnson	W. G. Maxwell
Venture	M. Goulding	C. Arthur

BURNHAM, MORRILL CO., HALIFAX, N.S.

Robie M.	C. G. Giffin	G. E. Scott

CALVIN CO., LTD., KINGSTON, ONT.

Chieftain	E. Felix	T. Gray
D. D. Calvin	G. Houston	G. Boyd
Frontenac	J. Harris	B. Lappen
India	G. Coons	T. Smith
Parthia	D. Lefave	G. Sauve
Simla	P. Sullivan	R. Veech
W Johnston	W. Felix	E. Compeau

CANADA ATLANTIC TRANSIT CO., LTD., MONTREAL.

Arthur Orr	J. Simonds	G. Larson
Geo. N. Orr	H. Joenke	J. Murnan
Kearsaige	W. Baxter	T. Kelley
Ottawa	A. Birnie	W. Paws

CANADIAN FISHING CO., VANCOUVER, B.C.

Celestial Empire	A. Freeman	J. Dick
Flamingo	A. Dawe	H. Hewitt

CANADIAN LAKE AND OCEAN NAVIGATION CO., LTD., TORONTO.

A. E. Ames	A. McIntyre	S. Gillespie
H. M. Pellatt	W. H. Anderson	W. H. Durham
J. H. Plummer	W. McLean	R. Chalmers
Scottish Hero	P. McIntyre	R. R. Foote
Turret Cape	R. D. Simpson	P. Bonham
Turret Chief	H. Boult	A. E. Kennedy
Turret Court	R. McIntyre	L. McMillan

CANADIAN LAKE TRANSPORTATION CO., LTD., TORONTO.

Corunna	W. H. Brian	R. W. Ross
Kenora	E. L. Stephen	W. Byers
Nevada	J. Cavanagh	W. Linton
Regina	P. McKay	C. J. McSorley

CANADIAN NORTH-WEST STEAMSHIP CO., LTD., TORONTO.

Neebing	J. Ewart	A. F. Foote

C.P.R. BRITISH COLUMBIA COAST SERVICE, VICTORIA, B.C.

Amur	L. P. Locke	J. Petticrew
Beaver	C. A. Gardner	W. Beadle
City of Nanaimo	D. Brown	T. Moffatt
Czar	T. S. Guns	G. C. Brownlee
Joan	J. Ritchie	J. M. Greenshields
Princess Beatrice	W. O. Hughes	J. Wallace
Princess Ena	W. H. Whiteley	R. Moffatt
Princess May	J. McLeod	J. McGraw
Princess Royal	P. J. Hickey	J. Heritage
Princess Victoria	T. O. Griffin	A. L. Brownlee
Tees	J. O. Townsend	J. Thaw
Transfer	W. L. Gilchrist	J. Hay

CANADIAN PACIFIC CAR AND PASSENGER TRANSFER CO., PRESCOTT, ONT.

Charles Lyon	W. Hemway	G. M. Hazlett
City of Belleville	A. Black	G. Piche

C.P.R. DETROIT RIVER CAR FERRIES, WINDSOR, ONT.

Michigan	C. H. Jenkings	F. Merrill
Ontario	J. Corney	W. McDonald

C.P.R. UPPER LAKE SERVICE, OWEN SOUND, ONT.

Alberta	M. McPhee	C. Butterworth
Assiniboia	E. B. Anderson	A. Cameron
Athabasca	A. Brown	W. Lockerbie
Keewatin	L. Pyette	W. Lewis
Manitoba	J. McIntyre	J. Gregg

CAPE BRETON ELECTRIC CO., LTD., SYDNEY, N.S.

Hygeia	A. McLeod	W. H. Scott
Pawnee	J. Brown	A. Campbell
Peerless	I. H. Lewis	A. McNeil

CENTRAL CANADA COAL CO., LTD., BROCKVILLE, ONT.

Samuel Marshall	H. M. Russell	W. J. Brown

CHARLOTTETOWN STEAM NAVIGATION CO., CHARLOTTETOWN, P.E.I.

Empress	A. Cameron	J. A. Rowe
Northumberland	A. McLean	C. Cuming

EASTERN MANITOULIN ROYAL MAIL STEAMSHIP LINE, LITTLE CURRENT, ONT.

Iroquois	E. Mackie	W. Terry

DOMINION ATLANTIC RY. CO., YARMOUTH, N.S.

Boston	W. Mackenzie	N. A. Currie
Prince Albert	D. W. Holmes	A. McInnis
Prince Arthur	E. Kenney	D. Campbell
Prince George	A. MacKinnon	D. Ferguson
Prince Rupert	A. G. Porter	J. Pendrigh
Yarmouth	N. S. MacKinnon	J. Ross

EMPRESS TRANSPORTATION CO. OF MIDLAND, LTD., MIDLAND, ONT.

Empress of Midl'd	J. Woolner	A. Abbey

J. B. FAIRGRIEVE, HAMILTON.

Arabian	G. A. Brien	W. Taylor

FARRAR TRANSPORTATION CO., LTD., COLLINGWOOD, ONT.

Collingwood	F. A. Bassett	P. McLeod
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NOTICE is hereby given that the annual meeting of the Shareholders of the Canadian Northern Quebec Railway Company will be held on Monday, the 13th day of April, A.D. 1908, at the hour of 12 o'clock noon, at the Company's Offices, 1 Toronto Street, Toronto, for the election of a Board of Directors and for the transaction of such business as may be brought before the Shareholders at an Annual Meeting.

By order of the Board.

W. H. MOORE,
Secretary The Canadian Northern Quebec Railway Company.

Toronto, March 9th, 1908.

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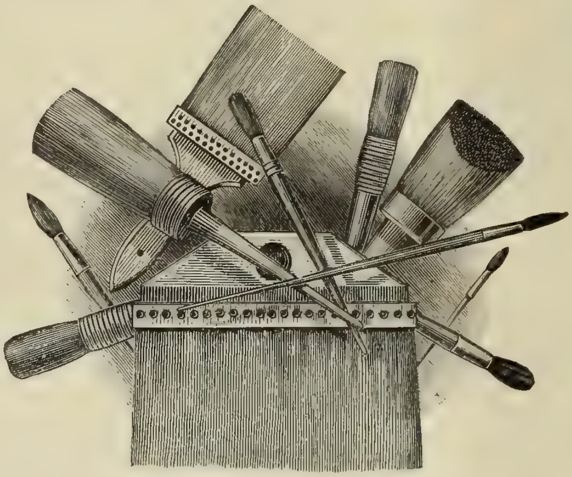

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Harbor and River Works in 1906-07.

During the nine months ended Mar. 31, 1907, the Department of Public Works expended $7,155,396.06 on various works, of which $1,532,255.77 went for improvements on harbors and rivers, $1,964,529.28 for dredging, and $98,636.08 on slides and booms for facilitating the bringing down of logs. The total revenue of the department during the same period was $279,484.15, of which $86,837.98 came from slides and booms, and $30,652.79 from graving docks. The amounts received from the several graving docks were: Esquimalt, B.C., $19,627.04; Kingston, Ont., $4,365.93; Levis, Que., $6,659.82. The receipts from the Esquimalt dock were greater than in the financial year 1905-06, but those for Kingston and Levis showed a considerable decrease.

Works of improvement upon harbors and rivers, other than dredging, have been carried on at 376 different points in the Dominion during the period under review, these works mainly consisting of the construction of wharves, piers, etc., their repair, improvement and reconstruction. During the year an important work under the control of the department was completed, viz., the high level pier in the lower division in the harbor of Montreal at Maisonneuve, the work having been executed in a very satisfactory manner by W. J. Poupore & Co., Ltd. Another work which was also handed over was the dock constructed in the harbor of Three Rivers, Que., by Randolph Macdonald, Toronto. This work has been placed under the management of the Harbor Commission of Three Rivers, and it is understood that the space which it affords has been immediately occupied by various companies trading with that port. The work was handed over to the department in very good condition, and reflects great credit on the contractor and engineers who have designed and superintended it. The contract called for the construction of 1,968 lineal feet of deep water wharf, and was entered into in 1903. The work should have been completed in Nov., 1905, but owing to the high water in the river during the summer of 1905, the work could not be carried on with the celerity desired, and the contractor was not able to complete the concrete work until the season of 1906. The work done and materials delivered on contract ($330,730) from beginning of work to Mar. 31, 1907, was about 97.27%, $321,732.60; amount to be deducted for work done up to June 30, 1906, being about 63.07%, $208,473.69, leaving a balance of $113,258.91, representing 34.20% of the work to be done by contract, as the value of the work performed during the nine months. On account of extra work there was supplied material to fill the gap between the 100 ft. embankment and the C.P.R. loop line to the value of $10,193.91.

In the Maritime Provinces dredging operations have been carried on at 23 different points by the department dredges, while work has been performed at St. John, N.B., by dredge belonging to G. B. Mayes, the work having been awarded after a public call for tenders. This work is now being continued by Mr. Mayes' dredge and by another owned by the Dominion Dredging Co. It is intended to add the dredge W. S. Fielding to the two other dredges in order to improve the entrance to the harbor, and to provide necessary berths for the steamships which are engaged in carrying on the winter trade between Canada and European ports. In Quebec province dredging was performed at 38 points; while in Ontario 34 places were improved. A large contract was given for dredging in the Kaministikwia and Mission rivers, and in Port Arthur harbor, these contracts being intended to extend over several years, and to provide sufficient water for the navigation which will require to use these channels when the work will be completed. Improvements of the same nature were also made by the department's plant in Manitoba and British Columbia.

The bulk of the fleet of privately owned dredges is found in Ontario and Quebec. In New Brunswick there is only one point where a private dredge is at work. In Nova Scotia, Prince Edward Island, Manitoba and British Columbia, all the work of that nature was being performed by dredges owned by the department. There were altogether 31 of these, distributed as follows: Maritime Provinces, 10; Ontario and Quebec, 15; Manitoba, 3; British Columbia, 3; with attending scows of various kinds. Some difficulty was experienced in getting the dredges towed from one place to another, especially for conducting the new dredging machines. For that purpose a large seagoing tug is required, and its cost will soon be covered when it is considered that during the season under review the sum of nearly $30,000 was expended in towage outside of that done by vessels owned by the department

Newfoundland Shipbuilding

An act for the encouragement of shipbuilding has recently been enacted in Newfoundland, by which all vessels built in accordance with schedule B, detailed in the Act, may be classed for 10 years, and shall receive a bounty of $8 a ton on builders' measurements. All vessels built in accordance with schedule C, detailed in the Act, may be classed for 7 years, and shall receive a bounty of $5 a ton on builders' measurements. All vessels built in accordance with schedule D, detailed in the Act, and not of greater tonnage than is therein provided, may be classed for 5 years, and shall receive a bounty of $4 a ton on builders' measurements. All vessels classed at Lloyd's under schedule A, detailed in the Act, shall receive a bounty of $10 a ton.

Certificates will be granted, in the case of vessels constructed to schedule B, after surveys, when the vessel is in full frame; when the planking is completed; and on completion of the vessel. In the other cases certificates may issue on a survey made when the vessel is completed. The owner or master of every ship surveyed for the purpose of being classed, or for obtaining bounty, shall before receiving his certificate pay to the treasury 10 cents for each registered ton of his vessel, and such sums may be recovered in any competent court, in the name of the Minister of Customs. An Inspector of Shipping, with deputies, will be appointed for the purpose of carrying out surveys, and penalties for making false statements in any reports of surveys are fixed at a fine of $500, or in default, one year's imprisonment.

Northern Navigation Co.'s New Vessel.

As announced in the annual report, published in our Feb. issue, the Northern Navigation Co. of Ontario arranged early this year for another steamship for service on Lakes Huron and Superior. The details have since been settled and the contract for construction executed. A brief description of the plans prepared was given in our June issue and the following additional particulars have been given us by H. H. Gildersleeve, Manager: The vessel will be a single screw package freight and passenger steamer of 5,000 gross tons, with a displacement of 6,500 tons. Her speed, when fully loaded, will be 17 miles an

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Steam and Electric Railway Cars

hour and 21 miles an hour with an ordinary freight load. The dimensions are: Length over all, 365 ft.; length between perpendiculars, 341 ft.; breadth, moulded, 50 ft.; depth moulded to main deck, 18.6 ft.; depth moulded to spar deck, 27 ft.; depth moulded to awning deck, 35 ft.; depth water ballast tank in freight hold, 4 ft.; depth water ballast tank in engine room, 5.9 ft. The classification of the entire steamer will be the highest of the Great Lakes Register.

The hull is to be built on the channel system with solid longitudinals extending from the top of floors to the inner bottom, chocked to shell plating and continued fore and aft as far as possible. The spar and main decks are to be steel throughout the entire length of the steamer. The highest grade of steel will be used. The hull will contain nine bulkheads, after peak, engine room, two coal bunker bulkheads, boiler bulkhead, three bulkheads in cargo hold and a forward collision bulkhead. A double bottom will extend from stem to stern of the steamer, being 4 ft. in depth from collision bulkhead to after end of boiler room, and 5 ft. 9 ins. from engine room after to peak bulkhead. The cabins will be spacious and will include many new features. Accommodation will be provided for 500 first and second-class passengers. Running hot and cold water will be provided in every room. A large observation and ball room, 80 by 30 ft., will be on the upper deck. The interior of the cabins will be finished in mahogany and artistically finished from end to end.

The propelling power will consist of a vertical quadruple expansion engine, with cylinders 24, 35, 52 and 80 ins. in diameter, and a stroke of 42 ins. These will be supplied with steam by six Scotch marine boilers, 12½ x 11 ft., with a working pressure of 250 lbs. of steam to the sq. inch. These boilers will be set on the tank top, athwart ship, three on a side, all facing one firehold running fore and aft. The boilers will be fitted with the forced draft system. Each boiler will contain 264 3-in. tubes, and two corrugated steel furnaces, 44 ins. inside, and 2,030 square feet of heating surface. The coal bunkers will be both fore and aft of the boilers, with a trunk feeder fore and aft. A complete refrigerating plant will be installed in the engine room, where also will be an electric lighting plant. The navigation end of the steamer will be supplied with the most modern instruments and all the latest and most improved appliances.

The plans have been prepared by H. Calderwood, Toronto, with F. Kirby, of Detroit, Mich., as consulting naval architect. Mr. Calderwood will also act as inspecting engineer during construction. Delivery is to be made in the spring of 1909.

◆

Reciprocating Engines vs. Turbines.

From the Scientific American.

A remarkable demonstration of the fact that the marine turbine does its best work when running at high speed, and that it ceases to be economical at low speed, occurred recently on the Great Lakes in connection with an attempt to capture the passenger traffic between two points, by placing upon the route a new and fast turbine steamer. The old-established service was operated by two boats, run by reciprocating engines at the very moderate speed of 16 miles an hour. The new company ordered a 21-knot turbine-driven boat from a British yard, placed her in service, and immediately began to secure the cream of the traffic. A representative of the old company, happening at this time to meet in England an engineer who had been prominently associated with the development of the turbine-driven steamship, told him of the conditions, and sought his advice as to the best way to meet the competition. The turbine engineer asked what was the speed of the boats of the competing lines, and on learning that it was respectively 16 and 21 knots, stated that it would be a very easy matter for the old company to drive the new fast boat off the route, by the very simple expedient of dropping the speed of their boats from 16 to 13 or 14 knots, and making the big reduction in fares which the reduced running expenses of the boats would render possible. He stated that the company owning the turbine steamer could never meet the cut in rates, for the reason that the reduction of the running speed of their vessel would not bring any corresponding reduction in the coal consumption. The company determined to make the experiment; and, after running their boats for a few months at a lower speed and a lower rate, they found that they not only recovered the passenger traffic which they had lost, but that the reduction in running expenses was so great, that they made more money than they had done under the old conditions. Furthermore, it was not many months before the turbine steamer was laid off the route and offered for sale.

It should be understood, however, that the conditions were peculiar at this point, and that the patrons of the line consisted largely of working people, to whom the reduction in fare, even if gained at the expense of time, was a decided consideration. Under average conditions the faster boat would have held the traffic, even at the high rates. We record the incident merely as showing in an interesting way the limitations imposed upon the marine turbine by its inability to run economically at low speed.

◆

Tonnage of Vessels Registered.

The Minister of Marine, in reply to a question in the House of Commons recently, gave the following figures, showing the tonnage of vessels registered in the various provinces during the statistical year ended June 30, 1907:

	Steam.				Sailing.			
	Wood.		Steel.		Wood.		Steel.	
	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.
New Brunswick	220	153	44,938	29,140	1,511	1,417	....	....
Nova Scotia	771	467	1,650	990	6,373	5,502	560	543
Quebec	622	402	3,623	2,145	4,385	4,154	1,318	1,226
Ontario	5,629	3,448	14,006	8,880	5,983	5,394	1,227	978
Prince Edward Island	211	98	....	....	117	95	....	....
British Columbia	5,247	3,313	351	185	1,250	1,238	1,496	1,380
Manitoba	438	283	....	....	....	....	....	....
Yukon	....	....	....	....	....	....	....	....
Saskatchewan	141	89	....	....	....	....	....	....
Total	13,279	8,253	64,568	41,340	19,619	17 800	4,601	4,217

For the same period the Customs Department paid the following sums for drawback on ships: Ontario, $10,747; Nova Scotia, $4,132.34; Quebec, $2,012.83; Prince Edward Island, $125.51; New Brunswick, $120.64; British Columbia, $78.01.

Quebec's Future as a Port.

The future of the port of Quebec was the subject upon which a lengthened interview was recently given by J. G. Scott, General Manager of the Quebec and Lake St. John Ry. In his view the future of the port is bound up with the development of the great territory northward and eastward and westward. The first railway to enter this territory was the Quebec and Lake St. John Ry., and it has done a great work in opening up land for settlement, in creating trade and adding to the wealth of the community. As a result there were, it was claimed, at least 10,000 men working during the present winter along the line. The construction of the Transcontinental Railway would bring in a large amount of trade to the port, while the Canadian Northern Ry. would also make the port a shipping point upon its transcontinental line. Then there was also the projected Trans-Canada Ry., with a route 100 to 300 miles further north than the transcontinental G.T. Pacific Ry. This would be the shortest route from Port Simpson to the Atlantic coast. It might seem Utopian to speak of a fourth transcontinental line, but he was of opinion that there would be business for it. The wheat belt of the great North-west extended 400 miles further north than the projected railway, and being over 300 miles north of the U.S. boundary would be a safer military line than any of the others.

The vital question for Quebec, however, Mr. Scott said, was terminals at the port. It would take quite as long to construct the docks, elevators and other terminal facilities as it would to complete the National Transcontinental Ry. Unless these terminals were ready when the railway was the traffic would be diverted elsewhere, and lost entirely. The Terminal Company had a plan for a splendid system of docks stretching from Diamond Harbor to Sillery, and the construction work should be undertaken without delay. The Louise docks are insufficient even for the comparatively small trade brought to Quebec by rail at the present time, and the proposed extension of these docks on the St. Charles side will be none too much for the business of the C.P.R. and the Canadian Northern Ry. There is only one berth at the Louise docks where a cargo of rails can be landed, or a general cargo shipped. "What kind of port is this," said Mr. Scott in conclusion, "for handling the business of three transcontinental railways?"

◆

Dominion Coal Company.

Following are extracts from the annual report for 1907:

The weather experienced throughout the winter and the spring was abnormally severe, thereby delaying the opening of navigation at Sydney by about four weeks, and owing to the presence of drift ice along the Nova Scotia coast and in the Gulf, the regular shipments to the St. Lawrence did not begin until June 6. These unusual conditions rendered it impossible to get up the full quantity of coal required for St. Lawrence points during the season of open navigation; supplementary shipments had to be made via Portland, Me., after the closing of the river, entailing heavy additional cost of railway carriage from that port to Montreal. The delays to steamers also caused an increase in the freighting costs.

In response to the invitation of the Federal Government to tender for the establishment of a wrecking plant to afford aid to wrecked, disabled or stranded vessels within the coastal waters of the Maritime Provinces and the Gulf of St. Lawrence, an offer was submitted by the company which was accepted, and an agreement entered into for five years. Certain of the company's steamers have been assigned to this duty and a complete salvage outfit purchased. During the eight months of its existence assistance has been rendered to 11 vessels.

Owing to the great difficulty experienced in obtaining schooners to carry on the coastwise trade, a specially designed steamer was built in Scotland to the company's order. This steamer, the Cabot, arrived at Sydney on Sept. 21, and has been continuously employed in the trade since that date.

A trestle and chute have been erected at Glace Bay Harbor to provide return cargoes for sailing craft coming in with lumber and produce, and the berth in this harbor dredged to enable vessels to lie alongside. These facilities have proved advantageous to the company.

Among the Express Companies.

H. M. Creighton, father of H. C. Creighton, Superintendent of the Canadian Ex. Co., St. John, N.B., died in that city recently, aged 86.

The Board of Railway Commissioners has extended the time within which express companies shall file and receive approval of their tariffs of tolls to June 1.

The financial statement of Newfoundland for the year ended June 30, 1907, recently presented to the Legislature, shows that $14,000 was received from the tax on banks and express companies.

The Winnipeg Messenger Co., Ltd., has been incorporated in Manitoba, with a capital of $20,000 and offices in Winnipeg, with power to carry on the businesses of general carriers, railway and forwarding agents, warehousemen, bonded and common car men, and express and transfer agents. The provisional directors are: W. Halpenny, Jr., R. Lawrie, W. Halpenny, J. T. Haig, Winnipeg.

Telegraph and Cable Matters.

The Board of Railway Commissioners has extended the time within which the North American Telegraph Co. shall file and receive approval of its tariffs of tolls to June 1.

The Marconi Wireless Telegraph Co. transmitted about 14,000 words across the Atlantic on the day it opened the Canada-Ireland general service.

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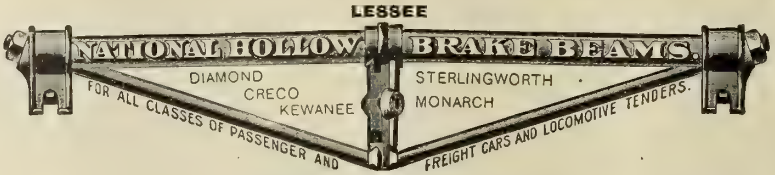
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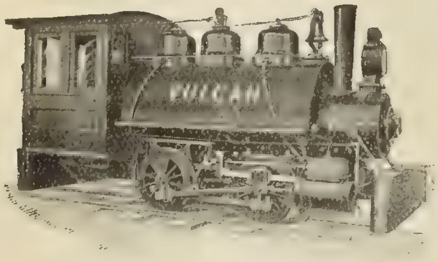

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R. N. Vyvyan, Chief Engineer Marconi Wireless telegraph station at Glace Bay, N.S., is reported to be about to retire from that position and to return to Great Britain.

The Western Union Telegraph Co. has opened offices at Bridgewater, Canso, Hawkesbury, Kentville, Lunenburg, Port Hastings, Port Mulgrave, Westville, Weymouth, and Windsor, N.S.; Edmundston, Sussex, and Woodstock, N.B., and Phœnix, B.C.

The Minister of Railways recently received a deputation of I.C.R. telegraph operators, who submitted their arguments for an increase of wages. This interview was arranged to take place a few months ago, but was deferred on account of the Minister's illness.

The Dominion Government is arranging, according to a Vancouver, B.C., despatch, to establish a wireless telegraph or cable service between Prince Rupert and Queen Charlotte Island, and between various of the larger islands off the coast of British Columbia.

The Manitoba Legislature has under consideration an act creating a department to have control of telegraph and telephone interests within the province. The Minister will be given power to construct, purchase or lease telegraph and telephone lines, and to operate same.

G. Marconi, while in Liverpool, Eng., recently, stated that when the installation of the latest apparatus was accomplished, which would be about June, he fully expected that the Marconi Wireless Telegraph Co.'s trans-Atlantic stations would be able to deal with, at least, 20,000 words a day.

Speaking at the Royal Institution, London, Eng., Mar. 13, G. Marconi said up to the end of Feb., 119,945 words had been accurately and expeditiously transmitted between Glace Bay, N.S., and Clifden, Ireland, by means of the wireless telegraph system. In seven years the range of wireless telegraphy had increased from 200 to 2,500 miles, and he hoped eventually to be able to send messages round the world.

C. P. Edwards, Inspector of the Marconi Wireless Telegraph Co., who arrived at St. John, N.B., Mar. 1, from England, stated that several new stations are to be constructed in the Maritime Provinces, and that prior to his leaving England, the apparatus had been installed on the C.P.R. steamship Lake Manitoba. The C.P.R. has ordered that all its vessels are to be similarly equipped before leaving the Liverpool docks.

Of the total revenue of Newfoundland for the year ended June 30, 1907, amounting to $2,750,690, the receipts from post office and telegraphs amounted to $50,673, and from telephone and telegraph tax (two years), $44,514. The expenditures amounted to $2,625,336, and included $391 for postal and telegraph services, which covers a number of ocean and coastal steamship subsidies. When the telegraph service was taken over from the Reid Newfoundland Co. in 1902, there were 53 offices with 859 miles of line; at present there are 109 offices with 2,783 miles of line. During the same period the revenues from the service increased from $13,313 to $50,673, and the expenditures from $27,911 to $61,829.

The Shedden Forwarding Co. has instituted an action against the Montreal City Council for $20,000 damage to its business on account of the bad condition of the city streets.

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Canadian Ry. Accident Ins. Co. .... Ottawa, Ont.

Advertising Matter
Valentine & Sons Publishing Co. .... Montreal.

Aerated Waters
E. L. Drewry .... Winnipeg.

Air Brakes and Fittings
Canada Foundry Co. .... Toronto.
Canadian Westinghouse Co. .... Hamilton. Ont.

Ales
E. L. Drewry .... Winnipeg.

Angle Bars
Hamilton Steel & Iron Co. .... Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co. .... Racine, Wis.

Automobiles
Polson Iron Works, Ltd .... Toronto

Axes
James Smart Mfg. Co. .... Brockville, Ont.

Axe Steel
Montreal Steel Works .... Montreal.

Axles
James Hutton & Co. .... Montreal.
Jas. W. Pyke & Co. .... Montreal.
Rhodes, Curry & Co. .... Amherst, N.S.
Taylor & Arnold .... Montreal.

Badges
R. Woodman Mfg. & Supply Co. .... Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co. .... Boston, Mass.

Beacons
International Marine Signal Co. .... Ottawa.

Bearings, Side
Chicago Railway Equipment Co. .... Chicago. Ill.

Blankets and Bedding
The Hudson's Bay Co. ....

Blasting Powder
Standard Explosives Limited .... Montreal

Boilers
Babcock & Wilcox (Ltd.) .... Montreal.
Canada Foundry Co. .... Toronto.
Jno. McDougall, Caledonian Iron Works Co. Montreal
Polson Iron Works .... Toronto.

Boilers, Portable
Canada Foundry Co. .... Toronto.
Robb Engineering Co. .... Amherst, N.S.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.) .... Montreal.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.) .... Montreal.

Boilers, Water Tube
Babcock & Wilcox (Ltd.) .... Montreal.
Jno. McDougall, Caledonian Iron Works Co. Montreal

Boilers Tubes
Jas. W. Pyke & Co. .... Montreal.

Bolsters
Dominion Car and Foundry Co. .... Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co. .... Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co. .... Toronto.

Bolts, Track
Toronto Bolt and Forging Co. .... Toronto.

Box Car Loaders
Mussens Limited .... Montreal.

Brake Beams
Chicago Railway Equipment Co. .... Chicago, Ill.
Dominion Car and Foundry Co. .... Montreal.

Brake Shoes
American Brake Shoe & F'dry Co. .... Mahwah, N.J.
Canadian Iron and Foundry Co. .... Montreal.
N. J. Holden Co., Ltd. .... Montreal.
Railway Materials Co. .... New York City.

Brass and Copper Cloth
The B. Greening Co. .... Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited .... Toronto.

Bridges
Canada Foundry Co. .... Toronto.
Canadian Bridge Co. .... Walkerville, Ont.
Dominion Bridge Co. .... Montreal.
Steel Concrete Co. (Ltd.) .... Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd. .... Montreal.
Kilgore-Peteler Co. .... Minneapolis, Minn.

Bumping Posts
McCord & Co. .... Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co. .... New York.

Buoys
International Marine Signal Co. .... Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd. .... Montreal.
The Wire and Cable Co. .... Montreal.

Caboose Heaters
Geo. R. Prowse .... Montreal.

Car Castings
American Brake Shoe & F'dry Co. .... Mahwah, N.J.
Canadian Iron and Foundry Co. .... Montreal.

Car Cleaner
Modoc Soap Co. .... Philadelphia, Pa.

Car Closets
Duner Co. .... Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd. .... Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co. .... New York.
Canadian Gold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co. .... New York.

Car Jacks
Canadian Fairbanks Co., Ltd. .... Montreal.
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.

Car Kitchen Equipments
Geo. R. Prowse .... Montreal.

Car Lighting
Bliss Electric Car Lighting Co. .... Milwaukee, Wis.
Consolidated Ry. Electric Light. & Equip. Co., N.Y.
Canadian Cold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co. .... New York.

Car Movers
Canadian Fairbanks Co., Ltd. .... Montreal.
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.
R. Woodman Mfg. & Supply Co .... Boston, Mass.

Car Ranges
Geo. R Prowse .... Montreal.

Car Replacers
Alexander Car Replacer Mfg. Co. .... Scranton, Pa.
N. J. Holden Co., Ltd. .... Montreal.
F H. Hopkins & Co. .... Montreal.

Car Seals
R. Woodman Mfg. & Supply Co. .... Boston, Mass.

Car Wash Brushes
Wolfe Brush Co. .... Pittsburg, Pa.

Cars
Canada Car Co., (Ltd) .... Montreal, Que.
Crossen Car Mfg. Co. .... Cobourg, Ont.
Dominion Car and Foundry Co. .... Montreal.
J. T. Gardner .... Chicago, Ill.
Hart-Otis Car Co. (Ltd.) .... Montreal.
Kilgore-Peteler Co. .... Minneapolis, Minn.
Preston Car and Coach Co., Ltd. .... Preston, Ont.
Rhodes Curry & Co. .... Amherst, N.S.

Cars, Coal
Kilgore-Peteler Co. .... Minneapolis, Minn.

Cars, Mine
Canadian Fairbanks Co., Ltd. .... Montreal.
Kilgore-Peteler Co. .... Minneapolis, Minn.

Car Windows
O. M Edwards .... Syracuse, N.Y.

Castings
Crossen Car Mfg. Co. .... Cobourg, Ont.

Castings, Brass
Canadian Bronze Co. .... Montreal.
Canadian Iron and Foundry Co. .... Montreal.
Kerr Engine Co. .... Walkerville, Ont.
St. Thomas Brass Co. .... St. Thomas, Ont.

Castings, Iron
Canada Car Co., Ltd. .... Montreal.
Canadian Iron and Foundry Co. .... Montreal.
Kerr Engine Co. .... Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co .... Mahwah, N.J.

Castings, Malleable
Taylor & Arnold .... Montreal.

Castings, Steel
Canadian Iron and Foundry Co. .... Montreal.
Montreal Steel Works .... Montreal.
Rhodes Curry & Co. .... Amherst, N.S.

Cast-Steel Hammers
American Brake Shoe & F'dry Co .... Mahwah, N J.

Cast-Steel Track Tools
American Brake Shoe & F'dry Co. .... Mahwah, N.J.

Cast-Steel Wrenches
American Brake Shoe & F'dry Co. .... Mahwah, N.J.

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Jas. W. Pyke & Co. .... Montreal.

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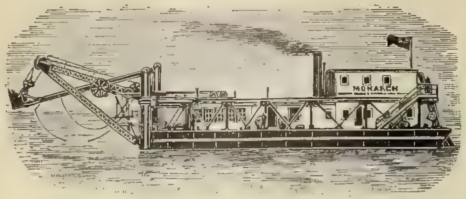

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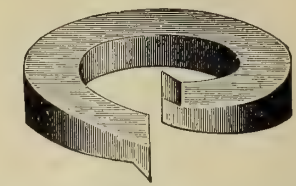

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F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co..............Toronto.

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Steel Concrete Co. (Ltd.).............Montreal.

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F. H. Hopkins & Co..................Montreal.
The W. H. Kelson Co................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Mussens Limited.....................Montreal.
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McConway & Torley Co...........Pittsburg, Pa.
National Malleable Castings Co...Cleveland, Ohio.
Washburn Steel Castings & Coupler Co.,
.........................Minneapolis, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co..........Toronto.

Cross Arm Braces
Canadian General Electric Co..........Toronto.
Toronto Bolt and Forging Co..........Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co......Toronto.

Crowbars
B. J. Coghlin & Co...................Montreal.
Toronto Bolt and Forging Co..........Toronto.

Culverts
Steel Concrete Co. (Ltd.)..............Montreal.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co , Hamilton.

Cuts
Acton Burrows Limited................Toronto.

Derailing Devices
Hayes Track Appliance Co........Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co..............Montreal.
The B. Greening Co.............Hamilton, Ont.

Derricks
M. Beatty & Sons...............Welland, Ont.
Miller Bros. & Toms..................Montreal.
Mussens Limited.....................Montreal.

Dies
Butterfield & Co.............Rock Island, Que.

Diving Outfits
John Date...........................Montreal.
Mussens Limited ....Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards.................Syracuse, N.Y.

Door Signs
Acton Burrows Limited................Toronto.

Draft Gear
Farlow Draft Gear Co...........Baltimore, Md.
McCord & Co.......................Chicago, Ill.
Standard Coupler Co.............New York City.

Drawing Materials
James Foster..........................Toronto.

Dredges
M. Beatty & Sons...............Welland, Ont.

Drills
W. Abbott...........................Montreal.

Drills, Twist
Baldwin Steel Co....................New York.

Dry Goods
The Hudson's Bay Co.........................

Dump Cars (Contractors')
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co..................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Toronto Pressed Steel Co..............Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.).............Montreal.

Electric Car Route Signs
Acton Burrows Limited................Toronto.

Electric Cranes
Babcock & Wilcox....................Montreal.
Canada Foundry Co....................Toronto.
Canadian Fairbanks Co., Ltd.........Montreal.
Dominion Bridge Co..................Montreal.
Mussens Limited.....................Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co...Mahwah, N J.

Electrical Fuses
Standard Explosives Limited..........Montreal.

Enameled Iron Signs
Acton Burrows Limited................Toronto.

Engineers' Supplies
Canadian Fairbanks Co...............Montreal.

Engines, Gasoline
Canadian Fairbanks Co...............Montreal.
Goold, Shapley & Muir Co.......Brantford, Ont.
Ontario Wind Engine and Pump Co.....Toronto.

Engines, Hoisting
M. Beatty & Sons................Welland, Ont.
Canadian Fairbanks Co., Ltd.........Montreal.

Engines, Stationary and Marine
Polson Iron Works.....................Toronto.

Explosives
Standard Explosives Limited..........Montreal.

Express Office Signs
Acton Burrows Limited................Toronto.

Fencing
Banwell-Hoxie Fence Co........Hamilton, Ont.
Canada Foundry Co....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd....... Walkerville, Ont.

Fire Brick
Mussens Limited ....Montreal.

Flags
The Hudson's Bay Co.........................

Flour
The Hudson's Bay Co.........................

Fog Signals
International Marine Signal Co.........Ottawa.

Forgings
Canada Car Co., Limited...... ....Montreal.
Crossen Car Mfg. Co.............Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.
Standard Steel Works..........Philadelphia, Pa.

Fuse Batteries
Standard Explosives Limited..........Montreal.

Fuse Detonators
Standard Explosives Limited..........Montreal.

Gaskets
McCord & Co.......................Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Gates
Banwell-Hoxie Fence Co.........Hamilton, Ont.
Canada Foundry Co....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound. Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Glue Brushes
Wolfe Brush Co.................Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co...............Chicago, Ill.

Groceries
The Hudson's Bay Company...................

Hammers
James Smart Mfg. Co..........Brockville, Ont.

Handcars
Canadian Fairbanks Co., Ltd.........Montreal.
Crossen Car Mfg. Co.............Cobourg, Ont.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
Rice Lewis & Son......................Toronto.
Toronto Pressed Steel Co..............Toronto.

Hardware
The Hudson's Bay Co.........................
Rice Lewis & Son......................Toronto.

Headlights
The N. L. Piper Railway Supply Co.....Toronto.
Pyle National Electric Head Light Co.Chicago, Ill.

Headlinings
Crossen Car Mfg. Co.............Cobourg, Ont.

Hoisting Machinery
Brown Hoisting Machinery Co....Cleveland, Ohio.
Canadian Fairbanks Co., Ltd.........Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hallow Staybolt Co..Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co..........................Chicago, Ill.

Hydrants
Canadian Fairbanks Co., Ltd.........Montreal.
Kerr Engine Co..............Walkerville, Ont.

Illustrations
Acton Burrows Limited................Toronto.

Inspections
R W. Hunt & Co......................Montreal.

Instruments, Surveying and Engineering
James Foster..........................Toronto.

Interlocking Signals
Montreal Steel Works.................Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.

Iron, Bar
Taylor & Arnold......................Montreal.

Iron, Pig
Hamilton Steel & Iron Co., Ltd..Hamilton, Ont.

Iron Signs
Acton Burrows Limited................Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Jacks
James Smart Mfg. Co...........Brockville, Ont.

Japans
McCaskill, Dougall & Co..............Montreal.

Journal Bearings
Canadian Bronze Co..................Montreal.
Crossen Car Mfg. Co.............Cobourg, Ont.
Kerr Engine Co..............Walkerville, Ont.
Jas W. Pyke & Co....................Montreal.
St. Thomas Brass Co..........St. Thomas, Ont.

Journal Boxes
N. J. Holden Co., Ltd................ Montreal.
McCord & Co.......................Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co.... ....Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry.........................Winnipeg.

Lamps, Incandescent
Canadian Westinghouse Co.......Hamilton, Ont.

Lamps and Lanterns
The Hudson's Bay Company...................
The Hiram L. Piper Co...............Montreal.
The N. L. Piper Railway Supply Co.....Toronto.

Launches
Polson Iron Works.....................Toronto.

Lights, Contractors' and Wrecking
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.

Locomotive Driver Brake Shoe
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Locomotive Lagging and Covering
Taylor & Arnold......................Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co........Kingston, Ont.
Montreal Locomotive Works (Ltd.)....Montreal.
H. K. Porter Co..................Pittsburg, Pa.

Locomotives (Electric)
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co....................Toronto.
Montreal Locomotive Works (Ltd.)....Montreal.

Locomotives (Logging)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co........Kingston, Ont.

Locomotives (Rack)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.........Kingston, Ont.
Montreal Locomotive Works (Ltd.)....Montreal.

Locomotives (Steam)
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co....................Toronto.
Canadian Fairbanks Co., Ltd.........Montreal.
Canadian Locomotive Co........Kingston, Ont.
J. T. Gardner ....Chicago, Ill.
The W. H Kelson Co..................Montreal.
Montreal Locomotive Works (Ltd.)....Montreal.
H. K. Porter Co.................Pittsburg, Pa.
Vulcan Iron Works............Wilkesbarre, Pa.

Locomotive Staybolts
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.
Flannery Bolt Co................Pittsburg, Pa.

Lubricators
McCord & Co. .... Chicago, Ill
Taylor & Arnold .... Montreal.

Machine Tools
W. Abbott .... Montreal.
Canadian Fairbanks Co. .... Montreal.

Machinery, Power
Jno. McDougall, Caledonian Iron Works Co. Montreal

Machinery Special
Miller Bros. & Toms .... Montreal.

Machinery, Transmission
Canadian Fairbanks Co., Ltd. .... Montreal.
Miller Bros. & Toms .... Montreal.

Manganese Steel Castings
Montreal Steel Works .... Montreal.

Manhole Frames and Covers
American Brake Shoe & F'dry Co. .. Mahwah, N.J.
Canadian Iron and Foundry Co. .... Montreal.

Marine Supplies
Rice Lewis & Son .... Toronto.

Milepost Numbers
Acton Burrows Limited .... Toronto.

Milling Cutters
W. Abbott .... Montreal.
Baldwin Steel Co. .... New York.

Motors
McCord & Co. .... Chicago, Ill.

Nickel
The Orford Copper Co. .... New York.

Nickel for Nickel Steel
The Orford Copper Co. .... New York.

Numbers
Acton Burrows Limited .... Toronto.

Nut Locks
Positive Lock Washer Co. .... Newark, N.J.

Nuts, Square and Hexagon
Canada Foundry Co. .... Toronto.
Toronto Bolt and Forging Co. .... Toronto.

Oakum
The Hudson's Bay Company ....

Office Fittings
Canadian Office & School Furniture Co., Preston, Ont.

Office Signs
Acton Burrows Limited .... Toronto.

Oil Furnaces
Railway Materials Co. .... New York City.

Oil Tanks
S. F. Bowser & Co. Limited .... Toronto.

Oils
Canadian Oil Co. .... Toronto.
Galena Signal Oil Co. Franklin, Pa., and Toronto.

Packing
Canadian Fairbanks Co., Ltd. .... Montreal.
The N. L. Piper Railway Supply Co. .... Toronto.

Paint Brushes
Wolfe Brush Co. .... Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co. .... Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co. .... Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co. .... Pittsburg, Pa.

Paints
Canadian Oil Co. .... Toronto.

Pictorial Post Cards
Valentine & Sons Publishing Co. .... Montreal

Pinch Bars
The N. L. Piper Railway Supply Co. .... Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co. .. New York.

Pipe Stocks
Butterfield & Co. .... Rock Island, Que.

Platforms, Steel
Standard Coupler Co. .... New York City.

Ploughs, Contractors'
Mussens Limited .... Montreal.
Toronto Pressed Steel Co. .... Toronto.

Pneumatic Tools
N. J. Holden Co., Ltd. .... Montreal.

Porter
E. L. Drewry .... Winnipeg.

Portable Boilers
Babcock & Wilcox (Ltd.) .... Montreal.
Robb Engineering Co. .... Amherst, N.S.

Power Houses
Steel Concrete Co. (Ltd.) .... Montreal.

Printing
The Hunter Rose Co. .... Toronto.
The Mail Job Printing Company .... Toronto.

Pumps
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Canadian Fairbanks Co. .... Montreal.
Canada Foundry Co. .... Toronto.
Goold, Shapley & Muir Co. .... Brantford, Ont.
Ontario Wind Engine and Pump Co. .... Toronto.
James Smart Mfg. Co. .... Brockville, Ont.

Pumps (Centrifugal)
M Beatty & Sons .... Welland, Ont.

Rail Benders, Roller
F. H. Hopkins & Co. .... Montreal.
Montreal Steel Works .... Montreal.

Rails (new)
Dominion Iron & Steel Co. .... Sydney, N.S.
Drummond. McCall & Co. .... Montreal.
J. T. Gardner .... Chicago, Ill.
J. J. Gartshore .... Toronto.
F. H. Hopkins & Co. .... Montreal.
Kilgore-Peteler Co. .... Minneapolis, Minn.

Rails (for relaying)
F. H Hopkins & Co. .... Montreal.
J. J. Gartshore .... Toronto.
Mussens Limited .... Montreal.
Jas. W. Pyke & Co. .... Montreal.

Rail Joints
The Rail Joint Co. of Canada .... Montreal.

Railway Pile Drivers
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.

Railway Supplies
Canadian Fairbanks Co. .... Montreal.
The W. H. Kelson Co. .... Montreal.
The Hiram L. Piper Co. .... Montreal.
The N. L. Piper Railway Supply Co. .... Toronto.
Rice Lewis & Son .... Toronto.

Reamers
W. Abbott .... Montreal.
Baldwin Steel Co. .... New York.
Butterfield & Co. .... Rock Island, Que.

Refrigerators
Geo. R. Prowse .... Montreal.

Rivets, Boiler, Bridge and Structural
Toronto Bolt and Forging Co. .... Toronto.

Rolled Wheels
Standard Steel Works .... Philadelphia, Pa.

Roof Trusses
Canadian Bridge Co. .... Walkeville, Ont.
Dominion Bridge Co. .... Montreal.

Rope
F. H. Hopkins & Co. .... Montreal.
The Hudson's Bay Co. ....

Rotary Snow Ploughs
Crossen Car Mfg. Co. .... Cobourg, Ont.

Roundhouses
Steel Concrete Co. (Ltd.) .... Montreal.

Sash Balances
O. M. Edwards .... Syracuse, N.Y.

Sash Locks
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Saw Steel
Montreal Steel Works .... Montreal.

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W. H. Knowlton .... Toronto.

Scrapers (Wheel and Drag)
Bechtels Limited .... Waterloo, Ont.
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.
Toronto Pressed Steel Co. .... Toronto.

Screw Plates
Butterfield & Co. .... Rock Island, Que.

Screws, Coach and Lag
Toronto Bolt and Forging Co. .... Toronto.

Semaphore Arms
Acton Burrows Limited .... Toronto.

Semaphores
The N. L Piper Railway Supply Co. .... Toronto.

Sewer Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

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O. M. Edwards .... Syracuse, N.Y.

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RAILWAY ELECTRIFICATION.

By H. L. Kirker, Resident Engineer, W. E. & M. Co., St. Clair Tunnel.

(Continued from last issue.)

Granting that electrification is the logical means of increasing the capacity of congested steam roads, and granting that the examples of three systems (the direct current third rail, the single phase trolley, and the three phase double trolley) demonstrate the commercial success of electrification in specific cases, it is not true that the technicalities of electrification are a handicap to the acquisition of a working knowledge of the subject. The electric motor is based on a principle as simple as that of the steam engine. Just as the steam engine depends on the expansive property of steam, so the electric motor depends upon the magnetic properties of the electric current. The magnetic properties of the electric current have been known for almost a century. They had no commercial significance, however, until discovery was made of a mechanical means of generating electric current. Faraday made this epoch-making discovery 76 years ago, and thereby started the industrial revolution that this subtle form of energy is effecting. Faraday, starting with the fact that current can produce motion, succeeded in demonstrating that motion can produce current. Industrialism harnessed Faraday's discovery to the steam engine. Given the steam driven dynamo, the evolution of the electric locomotive was inevitable. The magnetic properties of the electric current on which Faraday based his researches, which resulted in his discovery of a method of inducing current, are manifested by the two simple facts, that currents flowing in the same direction attract one another and currents flowing in opposite directions repel one another.

J. E. DALRYMPLE,
Assistant Freight Traffic Manager, Grand Trunk Pacific Railway.

INDUCTION.—In basing his research Faraday reasoned that since current produces magnetism, why, magnetism should produce current, and he discovered that by changing the magnetic conditions around a wire he could induce a current in the wire during the time the change in magnetic conditions was taking place. By the way of a mental picture he imagined the-wire-carrying-the-current to be encircled by a magnetic field, and represented this field by lines of force. He knew that sending a current through a wire set up a field around the wire, and that stopping the current withdrew the magnetic field. Now this dilation and contraction of the magnetic field incident to starting and stopping the current causes the lines of force to cut across adjacent wires. He discovered that this cutting of the lines of force across the adjacent wire induces an electric pressure in the adjacent wire. The result is the same whether the wire is stationary and the lines of force cut across the wire, or lines of force are stationary and the wire cut across the lines of force.

So electric current is induced in a wire by making the wire cut lines of force. The induction coil or transformer, as it is known commercially, is the classical adaption of the idea. The simple transformer consists of two coils of insulated wire wound on a common iron core. Sending an alternating current through one of the coils sets up an alternating field in the common iron core. This alternating field cuts across the second coil and induces alternating current in the second coil. The pressure of the current set up in the second coil depends on the rate of cutting lines of force. The rate of cutting depends upon the number of lines of force, on the frequency with which they reverse, and the number of turns in the secondary coil. A big core, a high frequency, and a secondary of many turns means a high voltage in the secondary coil. This transformer enables heavy alternating current of low voltage to be converted into a light current of high voltage. Small current means light line wire. High voltage means great power with small currents. High voltage consequently means long distance transmission of great power with small currents at small loss with a small line wire. The transformer then is the basis of long distance transmission of electric energy. It raises the voltage to the high pressure required for long distance transmission, and lowers the voltage to a safe working pressure at the point where the power is used.

THE DYNAMO.—The induction coil assumes the existence of an undulating current. Faraday applied his discovery to the production of alternating current. Having found that the cutting lines of force could induce current, he proceeded to induce current by moving a wire across a magnetic field. The dynamo is a machine for moving wires across a magnetic field—a machine for cutting lines of force. The essence of the elementary dynamo is a dense magnetic field and a coil of wire that rotates in this field. The greater the rate of cutting, the greater the voltage induced in the rotating coil. This rate can be increased by increasing the number of lines of force in the field, by increasing the number of turns in the coil, and by increasing the rate of rotation of the coil. Ordinarily, however, dynamos are built for moderate voltage and transformers are used to raise the alternating current to the high potential required for long distance transmission.

THE COMMUTATOR.—Since induction implies alternating current, whether the inducing apparatus be the transformer or the dynamo, the dynamo can be made to give continuous current—like that supplied by the storage battery. Alternating current is rectified by the commutator. The commutator is simple enough, but a description of it is rather tedious, and need not be given here. It will suffice to recall that in the transformer, while the field is dilating with the increasing primary current, the dilating field cuts across the secondary coil and induces a current in the secondary coil of opposite direction to that in the primary, and, while the field is contracting with the decreasing primary current, the contracting field cuts across the secondary wires and induces a secondary current of the same direction as the primary. That is to say, the direction of the induced current changes with the change of direction of the motion of the field. Likewise in the dynamo the direction of the induced current in the armature wire cutting across the field under the north pole, is opposite to the direction of the current induced in the same wire when cutting across the field under the south pole of the dynamo. Consequently it is necessary to group the armature coils and arrange the commutator taps in such a way that if the beginning of the coil leads to the posi-

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CHARLES MILLER,

PRESIDENT.

tive brush while the coil is under the north pole, why, the end of the coil will lead to the positive brush when the coil is under the south pole. The direct current dynamo is the alternating current dynamo plus the commutator.

The Direct Current Motor is not structurally a different machine from the direct current dynamo. The direct current machine can play the role of dynamo or motor. As a dynamo it transforms motion into electric current. As a motor it transforms electric current into motion. The steam engine drives the dynamo. The motor drives the locomotive. Both dynamo and motor involve the magnetic properties of the electric current, both machines involve Faraday's discovery of induction. In its simplest form the electric motor consists of a current-carrying-wire in a magnetic field. The presence of the current in the wire tends to make the wire move out of the field. The direction of the motion will change with the direction of the current. Consequently, the passage of an alternating current through the wire will cause the wire to vibrate back and forth across the field. This reciprocating motion can be changed into a rotary one, and a motor is the result. So far as motion is concerned, the motor depends on the magnetic properties of the current. But the very rotation of the armature wires in the field induces a voltage in the wires. If this induced voltage is less than the line voltage the line voltage drives a current through the motor armature. If the induced voltage equals the line voltage, why, no current flows. If the induced voltage is greater than the line voltage as in the case of the dynamo, why, the armature feeds the current into the line. When the line feeds current into the armature wires, these wires, in their effort to get out of the magnetic field, rotate the motor armature. The stronger the field, the greater the number of wires, and the greater the armature current, why, the greater the torque the motor armature gives.

Regulation.—The amount of current the motor armature takes depends upon the difference in pressure between the line voltage and the induced voltage in the motor armature. Primarily the armature speed regulates the voltage induced in the motor armature. If the motor is called upon to exert a torque greater than the actual current can exert, why, the armature slows down. The drop in speed drops the induced voltage. The drop in voltage allows a bigger current to flow. The bigger current exerts a bigger torque. The speed will continue to drop until the current increases to the point that it can exert the required force. On the other hand, a diminution of the motor load means an increase in speed. The increase in the armature speed will increase the induced voltage. The more nearly the armature voltage becomes equal to the line voltage, why, the less current the line drives through the motor armature. The armature speed will increase until the current drops to a strength that will give the required torque.

Power.—Admitting that the turning force exerted by the motor armature increases with current, it is also true that the drag on the steam engine increases with the current delivered by the dynamo armature. This of course accords with the magnetic properties of the electric current. As pointed out, a current-carrying-wire tends to move of its own accord in a particular direction across a magnetic field. An attempt to move the current-carrying-wire in the opposite direction demands force. An armature, driven at a speed that induces a voltage just equal to the line voltage, neither takes current from the line nor delivers current to the line. A slight drop in speed will drop the induced voltage enough to allow the line to drive a small current back through the armature against the induced voltage. The direction of this current with reference to the magnetic field is such as to make the armature continue to rotate in the same direction. The machine functions as a motor. On the other hand, a slight increase in speed will raise the induced voltage higher than the line voltage, and with the same direction of rotation will allow the armature to deliver current to the line. The point to note is that the armature current is now flowing in the direction of the induced voltage. The machine is functioning as a dynamo. The direction of rotation remaining the same and the direction of the current being reversed, it follows that power must be applied to the armature to keep up the rotation. The greater the current, the greater the power required, consequently the greater the drag on the steam engine, the greater the steam consumption.

Having seen that the transformer and the alternating current dynamo are the commercial application of Faraday's discovery of the induction of current by cutting lines of force, having seen that the addition of the commutator to the alternator enable the machine to deliver continuous current, having seen that the commutating machine can play the part of either direct current dynamo or direct current motor, and having seen that the turning force exerted by the motor and the drag of the dynamo armature on the steam engine are proportional to the current the machines are carrying, these facts sum up the elementary electric system. The dynamo, the line, and the motor, link the steam plant to the train. The electric current is the reincarnation of the energy of the steam engine, which energy ultimately appears as train motion. The fact that motion can be transformed into electric energy and that electric energy can be transformed into motion again, supplies a commercial means of transmitting enormous power from central stations to distant points of application.

In regard to the distance electric energy can be transmitted, the commercial limit of course is the investment in equipment. The investment necessary to be able to deliver a given amount of power for a given distance depends on the particular system used. The commercial limit of the investment is first reached with the direct current third rail system.

Third Rail Limits.—The commutator is the feature that limits the direct current system. Six hundred and fifty volts is about the highest pressure the direct current railway motor commutator can handle. (Recent improvements may raise the limit to 1,200 volts). Now, the power of an electric current depends not only on the current strength, but also on the pressure that drives the current. This means, of course, that electric power is proportional to the product of current by volts. Consequently, if enormous power is transmitted at low voltage, why, enormous currents must be used. For instance, an electric zone that involves 30 locomotives of 2,000 h.p. each would require, on a 600 volt system, 84,000 amperes to operate simultaneously the 30 locomotives at their nominal rating. An overhead trolley system could not handle this current. Hence the insulated third rail. Heavy feeder cables would be required to deliver this current to the third rail. Frequent substations would be necessary to cut down the length of these heavy feeder cables. Substations mean moving machinery for changing the alternating current into direct current, and as pointed out, moving machinery means operating crews. The low voltage commutator then is the occasion of the third rail, the feeders and the substations, since with the alternating current, a high voltage trolley system can be used.

The Single Phase Railway Motor is a low voltage motor. The series single phase railway motor is built for a lower voltage than the direct current motor. Its normal pressure is 240 volts—less than half that of the direct current railway motors. The fact that the single phase railway motor is a low voltage motor, does not imply an insulated third rail. On the other hand, the fact that the current is an alternating one admits of a high voltage trolley. The transformer on the car changes high pressure trolley current to low pressure motor current. The application of high pressure alternating current to the trolley of course eliminates the rotary converter substations. On long lines there would be transformer substations, but inasmuch as there are no moving parts about a transformer, no crew and a minimum of switch gears will be required for these substations.

It is necessary to have transformer substations on long distance single phase road, because, as pointed out, long distance transmission involves high voltage—60,000 volts is in common use on transmission lines. Trolleys cannot be insulated for this voltage —11,000 volts about represents the trolley limits at the present stage of the art. Consequently there must be a connecting link between the line and the trolley. The transformer is the link.

The track, as in the third rail system, is used as a part of the circuit in the single phase system. The circuit is made continuous by bonding the joints and connecting the track to the power line.

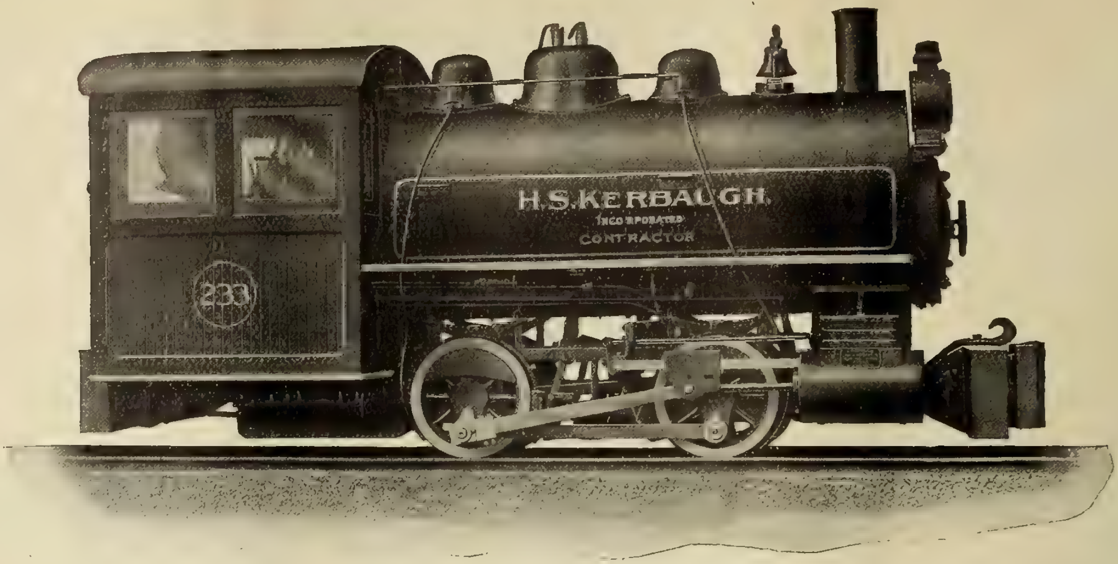
Interference with Signal Circuits.—The use of the track as a part of the power circuit interferes with the signal system. Special precautions have to be taken to insulate the signal circuit from the power circuits.

The alternating current is more apt to interfere with the telephone and telegraph circuit than the direct current is apt to interfere with them. Whenever there is alternating current there is induction. This means that special precautions have to be taken with the telephone and telegraph systems to neutralize the effects of this induction.

Electrification means more or less reconstruction of the signal, telephone, and telegraph systems, when the alternating current is used than when the direct is used. However, there should be no electrolysis of pipes and structures when alternating current is used.

Admitting that the single phase system eliminates the rotary converter substations, eliminates the third rail, eliminates the electrolysis; admitting that it extends the overhead trolley to main line railway work, and admitting that its effects on the signal systems can be neutralized, it is not also true that the single phase railway motor is as simple a machine as the direct current railway motor. The single phase series railway motor is a special case of the direct current railway motor. Since the single phase motor operates on alternating current, special design is necessary to minimize the results of induction incident to alternating current. Refinement in design has reduced the heating and sparking effects of this induction to such a point that the single phase railway motor is now a commercial machine.

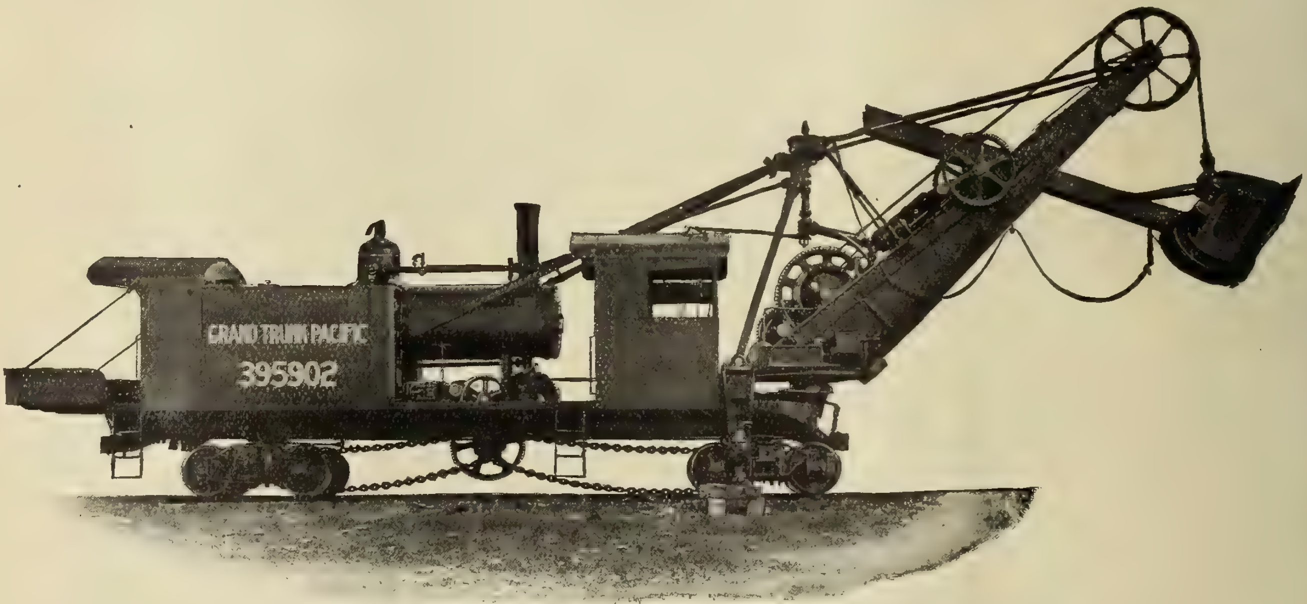
Power Factor.—The alternating current has another distinctive characteristic. In the direct current system the power is the product of the current by the volts. In the alternating current system the power is generally less than the product of the current by the volts. The power factor of the alternating current motor may be as low as 75% of the product of the current by the volts. This is due to the fact that the pressure is an alternating one, and that the waves of



AMERICAN LOCOMOTIVE COMPANY

LIGHT LOCOMOTIVES

Suitable for Contractors, Mines, Lumber Companies, etc., and for a wide range of service where light rails, uneven roadbeds and sharp curves require a short, rigid wheel base and all weight to be carried on driving wheels.



ATLANTIC STEAM SHOVELS

All Capacities, Immediate Shipment

SELLING AGENTS

THE CANADIAN FAIRBANKS CO., LIMITED

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current resulting from this pressure are not maximum when the pressure is maximum. The lag of the current wave behind the pressure wave varies with the amount of self induction the alternating current produces in the circuit. The less the lag of the current crest behind the voltage crest, the more nearly the power factor of the circuit becomes unity. The single phase motor must be designed to give a large power factor—otherwise it will be much larger for a given output than a direct current motor of equal capacity.

The speed of the series single phase motor is not dependent on the frequency of the alternating current. As in the case of the direct series motor the speed depends on the load on the motor. As previously pointed out, an increase of load on the motor pulls down the speed to a point that allows a current to flow that will give the required torque. In the case of the series motor, as the name implies, the armature winding is in series with the field winding, consequently, since the current that flows through the armature also flows through the field, an increase in current strengthens the field. Consequently there is an increase in torque, not only on account of increase in armature current but also on account of increase in field strength. This increased field strength also means that the armature can induce approximately the same voltage at a lower speed. These two facts—the increase in torque due to increased armature current, with its consequent increased field strength, and the drop in speed incident to increased field strength—explain the powerful accelerating force exerted by the locomotive equipped with series motors; they also explain the small amount of power required to produce this acceleration. Now the fact that the armature current and the field magnetism reverse simultaneously means that the direction of rotation remains unchanged, consequently the frequency with which these reversals take place does not determine the armature speed.

The frequency in use on the single phase railway systems in America is the same as that in most of the greater power stations in America—25 cycle—that is to say, the waves of current follow each other through the circuit at the rate of 25 waves per second.

The designers of the single phase electric locomotive maintain that a lower frequency than 25 cycle would mean that a more powerful machine could be placed in the limiting dimensions of the locomotive. They maintain that the application of the single phase motor to railway work will be so extensive that the aggregate advantage of a lower frequency motor will offset the disadvantage of a frequency different from that now used in most American power stations.

Three Phase Generator and Motor.—Having seen that the simple alternator is the result of Faraday's discovery of induction, and that the addition of the commutator to the alternator enables it to deliver current in a continuous stream, and having seen that the commutating machine becomes a motor when supplied with continuous current, and having seen that a series motor of special design can operate on the waves of current supplied by the simple alternator, and having seen that the application of alternating current to railway work eliminates the rotary converter substations and substitutes the high voltage trolley for the low voltage third rail, it follows that the alternator that supplies current for the three phase motor is fundamentally the same machine that supplies current for the single phase motor. The single phase armature can be tapped to give three phase current, but ordinarily the winding of the three phase armature consists of three coils (one for each line wire). It is a three-legged arrangement. One terminal of each coil goes to its line wire, the other terminal of each coil goes to a common junction. The windings are so disposed that each coil successively sends a wave of current out of its line wire through the motor, and back through the other two line wires through the other two armature coils to the common junction.

The three phase motor is in common use. Its simplicity of construction has led to its application in enormous numbers to constant speed work. It has no commutator. The winding of the rotating part consists essentially of a squirrel cage of copper embedded in an iron rotor core. The rotating field set up by the three phase current induces a current in the squirrel cage. The magnetic properties of the induced current cause the squirrel cage to be dragged around by the rotating magnetic field.

The Rotating Magnetic Field is produced by the three phase current, somewhat in the same fashion that a three crank arrangement produces rotation. The winding of the stationary part of the motor is essentially that of the three phase generator armature. There are three coils—one for each line wire. One terminal of each coil goes to a line wire, the other terminals go to a common junction. These coils are disposed around the stator so as to lie relatively 120 degrees from one another. A wave of current through one of the coils sets up a magnetic field across a particular diameter of stator. An instant later a wave of current through the second coil sets up a magnetic field across a diameter 120 degrees in advance of where it was before. An instant later a wave of current through the third coil sets up a magnetic field across the third diameter 120 degrees in advance of where it was the instant before. An instant later another wave of current through the first coil advances the field another 120 degrees, completing the revolution. In other words, the generator dispatches a wave into one line wire and then an instant later a wave of current into the second line wire, then an instant later a wave into the third line wire, then an instant later another wave into the first line wire, and so on. Timing these waves in terms of one revolution of the generator armature, the crest of the wave in the first line is 120 degrees ahead of the crest of the wave of the second line wire, the crest of the wave in the second line wire is 120 degrees ahead of the crest of the wave in the third line wire, the crest of the wave in the third line wire is 120 degrees ahead of the crest of the second wave in the first line wire, and so on. This 120 degrees difference in phase of the three line currents consequently produces the rotating field in the motor.

The speed of the three phase motor depends upon the frequency of the current waves. Since a group of one wave per circuit means (in a simple machine) one revolution of the magnetic field, it follows that the number of revolutions the rotating field makes per second equals the number of waves (per circuit) per second. If, for instance, 25 waves travel along each line wire per second, the magnetic field will make 25 revolutions per second. It also follows that since the speed of the generator is fixed, why, the number of current waves per second is fixed, the number of revolutions the rotating field makes per second is fixed, consequently the speed of the motor is fixed.

The fact that the speed of the three phase motor is fixed is not too great a disadvantage in the electric locomotive, as it would seem since at least three speeds can be obtained by grouping the motors and regrouping the field windings of the motor.

Recuperation.—There is an advantage that is more or less peculiar to the three phase motor, which readily lends itself to the electric braking. This feature was perhaps the deciding one in the adoption of the three phase locomotive for the Cascade tunnel. On down grade the motors on the locomotive can act as generators and feed current into the line. The fact that they are acting as generators means that they are consuming power that would otherwise have to be used up in brake shoes. This power fed into the line helps out of course the power station in dragging other locomotives up grade. It must be added that the single phase locomotive can also feed current into the line on down grade, likewise the direct current motor, but hardly with the same simplicity as the three phase locomotive.

The three phase railway motor is a high voltage motor. It can be built for pressure as high as 6,000 volts. This means that with a 6,000 volt trolley pressure no reducing transformer is required on the locomotive.

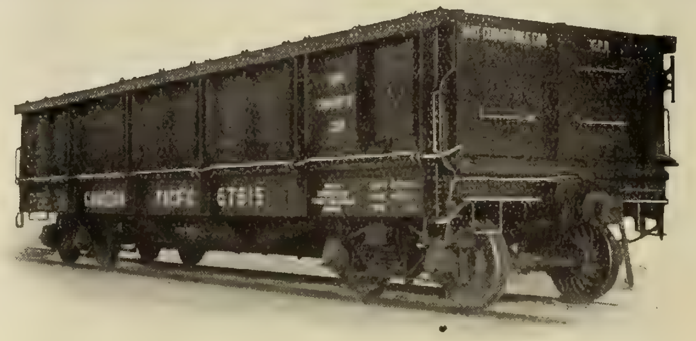
The track is a part of the circuit when three phase locomotives are used. The bonded track constitutes one line wire. The two overhead trolleys are the other two line wires. The fact that the three phase locomotive requires two overhead trolleys place a serious handicap on the system. The presence of two overhead trolleys, insulated from each other and from the rail, necessarily means a more or less complicated trolley system, especially at turn-outs and in terminals. It also means a double collecting device. This double overhead system and double collecting device of course cannot compare in simplicity with the single phase trolley.

Summary.—The three phase system, the single phase system, and the third rail system have no other pronounced characteristics than those already mentioned. The characteristics of the three systems are few and distinct. The three phase system implies two overhead trolleys, and practically constant speed on grade and main line work. It, like the single phase system, can be easily extended to long distance work by the use of simple transformer substations. The single phase system, in addition to this long distance advantage which it shares with the three phase system, has the distinct advantage resulting from a single overhead trolley. The single phase system possesses in common with the direct current system the speed characteristics of the steam locomotive. The third rail system has the advantage of 25 years of experience, and a splendid record. The limitations of the third rail system are the insulated third rail, the heavy feeders, and the substations necessary for changing the alternating current into the direct.

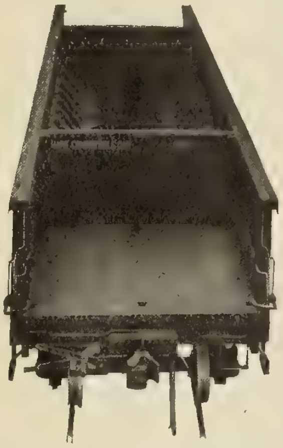
There are other electric railway systems than the direct current, the single phase, and the three phase. But these are the only ones doing heavy railway work.

Admitting that the electric locomotive (whether direct current, or single phase, or three phase) is a powerful engine, and that it can easily exceed the steam locomotive in draw bar pull and speed, admitting that the motors can readily stand the hard usage that railway work involves, it is true that the auxiliary apparatus required for collecting the current, and controlling the application of the current to the motors is likewise sufficiently simple and reliable to meet the requirements of railway service. The collecting and controlling devices can be made as simple and reliable as the air brake mechanism. As with the air brake, the wearing parts are easily replaced, and similar groups are interchangeable. Once a grasp of the simple underlying principle of the electric system is obtained, a working knowledge of the apparatus is easily acquired. The collecting device, the automatic cut-outs, the master controller, or rheostat (or auto transformer as the case may be), and the switch group, have their particular duties to perform. A failure of any of these renders the locomotive helpless. Consequently, they are built for reliability, durability, quick repairs, easy replacement.

The New Hart Convertible Cars for the Canadian Pacific Railway



50 Ton Car with Steel Underframe, Steel Stakes, Steel Side Plates and Steel Hopper.



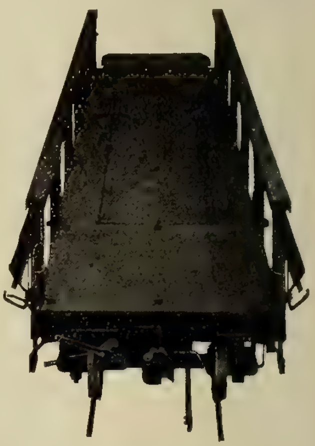
The Hart-Otis Car Company have recently designed and are having built for the Canadian Pacific Railway, 400 of their latest Hart Convertible Cars, which are without a doubt the strongest and most efficient cars that have ever been built for ballast and construction work. Realizing the advantage of having this class of equipment strong enough to withstand the severe strain that construction or ballast work places upon cars, it was decided to spare no expense in getting up this design, and that they have succeeded will no doubt be admitted by any impartial critic who will carefully examine these cars.

The cars have a cubic capacity of 40 yards, when loaded as a centre dump hopper car for ballasting, and of 58 yards when used as a level floor side dump gondola car.

The length of the car is	36′ 10″ between end sills and 38′ 4″ over buffers.
The length inside is	35′ 0″ as a gondola. 21′ 6″ as a hopper ballast car.
Width inside..............	8′ 8″
Height inside	4′ 2½″
Height from top of rail to top of car	8′ 6½″

The centre hopper door is made of steel built-up sections and has a full opening of 24 inches, by the length of the bottom of the hopper which is 18′1″.

When working these cars in centre ballast service the man operating the car absolutely controls the opening of the hopper door, by means of an escapement lever which allows the door to open about one inch at a time. This controls the flow of ballast from the car into the centre of the track, so that the operator can dump as little or as much in the track as desired.



When the car is used as a side dump, with convertible floor doors turned down and arranged for pulling a top plow over the car, the side doors have an opening of about 6′6″ x 3′8″. It will thus be seen that the largest possible stone that could be loaded with a steam shovel can be put through these door openings. While we do not advocate loading boulders into a car of this type, accidents will happen and the car was designed with this in view.

The floor of the car is composed of 2¼″ tongue and grooved pine flooring. The convertible doors are composed of 2½″ long leaf southern pine planking shiplapped. The side doors and end gates are made of 2″ Norway pine planking. All other parts of the car are steel construction.

This car also embodies our latest improved hand brake arrangement, which is especially designed for cars of this type, the object being to bring all parts of the hand brake below the top of the side of the car, so as to keep the top of car cleared from all obstruction for steam shovel loading.

There are many minor improvements that have been made on this car, which will be appreciated by those using the cars.

THE HART-OTIS CAR CO., LIMITED, MONTREAL

Successors to Dominion DUMP CAR Company, Limited

"Double heading" is easier with electric locomotives than with steam locomotives. Electric locomotives can be grouped to act as a single unit. The combined group can be handled by the master controller and brake valve of any one of the constituent units. Moreover, if the cars were equipped with a train-control-line, the locomotives could be distributed through the train and handled as a single locomotive from any one of the units. The equipping of freight cars with a train-control-line is not necessarily a more serious undertaking than equipping freight cars with air brakes. It is merely a means of interconnecting the master controllers of the various locomotives, and putting them under the control of one operator. However it implies of course a common scheme of control in order that the freight cars be interchangeable on the different systems.

The electric locomotive is not the only means of applying the motor to railway transportation. Instead of concentrating powerful motors in one engine, smaller motors can be placed on several cars of the train, the train can be equipped with a control-line, and, consequently all the motors can be controlled from any one of the master controllers. This is the system of multiple-unit-train-control used on the New York subway, the Mersey Ry., the London Metropolitan, Paris Metropolitan, and many other roads. It is equally applicable to suburban passenger service and even to main line passenger service.

Electrification does not necessarily involve a revolution in transportation methods when applied to existing steam roads. In most cases where it has been applied it has been merely a substitution of the electric locomotive or multiple unit control for steam locomotive. The more general application of electrification, however, is sure to modify present methods of transportation. Mr. Steinmetz sums up electrification to mean "that the change from steam power to electric power is not a mere substitution of the electric locomotive for the steam locomotive, but a readjustment of the ways of operation, that is, an increase of speed of operation of freight service by taking advantage of the feature of the electric locomotive being able to carry its draw bar pull up to a higher speed. Higher speed necessarily means increased capacity of the system, even with less draw bar pull, and in this feature lies the main advantages of electric traction, but it is necessary to readjust the method of operation to the changed conditions of railroad motive power, to get the best results with the electric locomotive."

The foregoing paper, which was written in the form of question and answer, but from which we have omitted the questions, summarizing them where necessary to the context, was read at a meeting of the Canadian Railway Club recently.

Pay of Railway Employes.

Among the additional information collected by the Department of Railways statistical branch for the past year has been the number of persons in railway employ, together with particulars regarding their pay. The total number of persons in the employ of Canadian railways during the year ended June 30, 1907, was ascertained to be 124,012. Some little confusion is reported to have arisen with respect to the interpretation of the schedules in relation to average rates of pay, but the results as figured out are considered to be reasonably accurate. The total amount paid in salaries and wages was reported to be $58,719,493, equal to 56.59% of the operating expenses. It was divided as follows: General administration, $3,760,138, among 5,126 employes; maintenance of way and structures, $15,398,885, among 48,516 employes; maintenance of equipment, $12,161,917, among 21,495 employes; conducting transportation, $27,398,553, among 48,875 employes. The following table shows the number of employes of each class and their average daily compensation:

Employes.	No.	Average daily Compensation.
General officers	336	$11.07
Other officers	461	4.11
Office clerks	4,214	1.68
Station agents	2,536	1.90
Other stationmen	11,829	1.57
Enginemen	4,351	3.91
Firemen	4,760	2.40
Conductors	2,911	3.20
Other trainmen	8,261	2.00
Machinists	2,486	2.09
Carpenters	3,215	2.09
Other shopmen	12,579	1.98
Section foremen	3,903	1.90
Other trackmen	30,614	1.45
Switch tenders and watchmen	2,364	1.83
Telegraph operators and dispatchers	2,987	1.87
Floating equipment employes	5,426	1.18
All other employes	20,779	1.80
Total	124,012	

Canadian Westinghouse Company, Ltd.

Following are extracts from the annual report for the year 1907: There was a profit of $427,053.25 from the operations during the year (an increase of 23%, compared with previous year), and a surplus on Dec. 31, 1907, of $391,284.55, after payment of a dividend of 6% on capital stock and the addition of $100,000.00 to the reserve heretofore created for depreciation of property and plant. While the plant and machinery are nearly new and important additions have been only recently installed, the directors have deemed it wise and prudent to add a substantial amount to the reserve for depreciation from the favorable earnings of the past year. Additional capital stock to the amount of $884,600.00 was subscribed by the stockholders at par during the year to provide additional working capital, made necessary by the growth of the business. Of these subscriptions $369,700.00 have been paid in on regular calls and the balance is due on calls maturing during the first half of the present year. A marked feature of the operations of the electrical department during the past year was the assumption of manufacturing load by the works at Hamilton. Out of the total billing of electrical machinery during the year, 82% represented apparatus manufactured in the Hamilton works, compared with 43% during the previous year. The cost of production in relation to shipments has decreased and the ratio of profit appreciably increased during the year, demonstrating the efficiency of the plant and operating organization. The additions to property and plant during the year aggregated $265,360.00, including heavy machinery, tools and equipment for the electrical department, ordered in 1906-7, and the enlargement and reconstruction of the air brake department plant. This last named work, including the conversion of a single story structure into one having two uniform floors throughout, was successfully carried out coincidently with an increased output of 35%, compared with the previous year. Orders for new apparatus showed a satisfactory increase up to Sept. 30, 1907. The general commercial and financial depression existing throughout the Dominion during the last quarter of 1907, in common with a similar depression in the U.S., and other countries, resulted in a sharp curtailment of orders, although shipments on previous orders were continued with only slight reductions. The total value of orders for the year accordingly shows a decrease of 14%, while the number of sales increased 25%, indicating that individual orders while greater in number were, on an average, smaller in amount than during the previous year. Unfilled orders on hand Dec. 31, 1907, aggregated $1,136,000.00. Since the close of the year inquiries have been resumed and the management have been called on to furnish estimates for several projects requiring large apparatus. When commercial conditions have resumed their normal status and sufficient capital is procurable to finance these prospective enterprises and enlargements, it is safe to assume an average business will result.

ASSETS.

Cash	$ 11,744.45
Accounts and bills receivable	1,194,613.66
Property and plant (includes air brake and electric properties, real estate, general office building, equipment, sundries and patents, rights and licenses)	2,736,771.22
Materials and products on hand Dec. 31, 1907	1,330,529.60
Insurance unexpired and taxes paid in advance	14,953.24
	$5,288,612.17

LIABILITIES.

Capital stock:		
Authorized	$5,000,000.00	
Issued		$3,869.700.00
Accounts payable		458,435.73
Bank of British North America		349,191.89
Reserve for depreciation of property and plant		200,000.00
Reserve for inventory adjustment		20,000.00
Profit and loss account		391,284.55
		$5,288,612.17

PROFIT AND LOSS ACCOUNT.

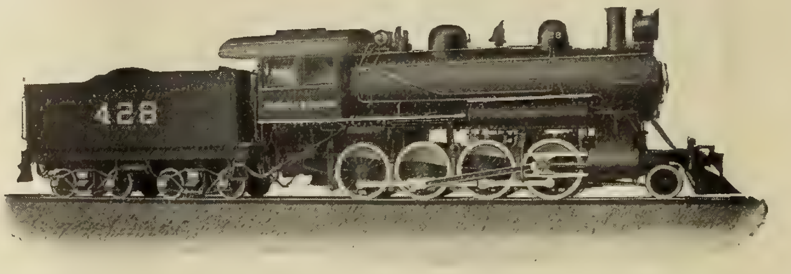
Net balance, brought forward Jan 1, 1907			$ 279,452.40
Net earnings, year ended Dec 31, 1907		$427,053.25	
Less dividends paid for 1907	$215 221.10		
Less reserve for depreciation of property and plant	$100,000.00	315,221.10	111,832.15
Balance carried forward, Jan. 1, 1908			$ 391,284.55

Automatic Carbon Dioxide Recorder.

The C.P.R. is using in its Angus shops, Montreal, an automatic recording apparatus which gives a continuous and constantly visible record of the composition of the waste or flue gases from the stationary boilers in the power plant which drives all the machinery and lights the shops, offices and yards. The apparatus reveals the percentage of carbon dioxide, or CO_2, in the waste furnace gases which are passing out of the power house chimney. Theoretically, 21% of CO_2 in the flue gases would indicate perfect combustion. The apparatus is graduated from 0 to 20 and the record is within these limits. It is altogether a cleverly constructed piece of mechanism which is kept in motion by the passage of the hot gas as it goes out to the chimney. The mechanism is not placed in the chimney, but has a convenient position in the engine room and a pipe connecting with the smoke flue carries a small quantity of the waste gas to a filter and on to the machine. The analysis is automatic and depends upon the absorption of CO_2, by a solution of caustic potash. The record is made by a tracing-pen operated by a lever, which is moved by the varying pressure of the gas above the vessel containing the potash solution. A clockwork machine moves a graduated sheet of paper past the tracing pen, and this is visible through the glass front of the machine. It is, therefore, always open to inspection by the firemen as well as by officers of the company, and any excess of air or the results of imperfectly burned coal are at once apparent and a remedy can forthwith be applied without waiting for the registering mechanism to be detached or the paper taken out for inspection. The amount of deviation from the normal in the quality of the firing is thus constantly before the eyes of the performers with the coal scoop, and also a useful record of the economy or the reverse in fuel consumption is kept.—Railway and Locomotive Engineering.

LOCOMOTIVES

Steam **Electric**



Freight Locomotive — Consolidation Type. Built for Canadian Northern Railway. Total weight in working order, 176,740 pounds, with 156,120 pounds on driving wheels. Size of cylinders 21″ diameter and 26″ stroke. Maximum Tractive Power 34,200 pounds.

STEAM SHOVELS

Designed for economical operation, with large boiler, few parts, accurately fitted, and all repair parts interchangeable.

Wire rope hoist with one sheave in place of expensive chain hoist and sheaves.

MONTREAL LOCOMOTIVE WORKS, LTD.

Bank of Ottawa Building, Montreal, Canada.

London Offices: 26 Victoria St., Westminster.

Delaware and Hudson Co.'s Report.

The preliminary income account for the year ended Dec. 31, 1907, shows gross earnings of $43,326,459, against $35,621,371 for 1906; operating expenses, $33,791,314, against $27,800,055; net earnings, $9,535,145, against $7,821,316; other income, $928,847, against $824,243; total income, $10,463,993, against $8,645,560; charges and taxes, $3,997,819, against $3,343,938; net income, $6,466,174, against $5,301,622. Following are the figures relating to the railway department:

	1907 Amount.	1907 P.C. of Gross	1906 Amount.	1906 P.C. of Gross
Gross earnings	$20,141,694	.....	$17,050,029	.....
Expenses and taxes	12,132,620	60.23	10,670,628	62.58
Net earnings	8,009,074	39.77	6,379,401	37.42

The income account shows actual earnings available for dividends equal to 15.25% on the $42,400,000 outstanding capital stock, as compared with an amount the previous year equal to 12.62% on the then outstanding $42,000,000 capital stock. After the deduction of $350,000 for accrued car trust certificates and equipment debentures and of $325,000 accrued payments under the first lien equipment trust of July 1, 1907, there remained an amount applicable to dividends equal to 13.65% on the $42,400,000 outstanding capital stock. Earnings for the year would have made even a more favorable showing if it had not been that Nov. and Dec. earnings failed to keep pace with those for the other months of the year. Dec. railway gross showed an increase equal to 15.1%, and railway net an increase equal to 5%. A heavy falling off in the coal department's earnings, however, was responsible for the total net, showing a decrease of 17.05%. The coal department's net for the entire year was decreased by $92,015, equal to 8.77%, while the railway department's net was increased by $1,629,674, equal to 25.54%. The net for both departments was increased by $1,713,829, equal to 21.91%.

The company operates the Quebec, Montreal and Southern Ry., and the Napierville Junction Ry. in Canada.

May Birthdays.

Many happy returns of the day to—

W. R. Baker, Secretary and Assistant to President C.P.R., Montreal, born at York, Eng., May 25, 1852.

G. S. Cantlie, Superintendent Car Service, C.P.R., Montreal, born there May 2, 1867.

M. Donaldson, Superintendent Ottawa Division G.T.R., Ottawa, Ont., born near Edinburgh, Scotland, May 1, 1851.

G. C. Dunn, District Engineer Transcontinental Railway surveys, St. John, N.B., born at Quebec, May 13, 1862.

Hon. W. C. Edwards, Temiskaming Steamboat Co., Rockland, Ont., born at Clarence, Ont., May 7, 1844.

J. D. Evans, Engineer Central Ontario Ry., Trenton, Ont., born at Goderich, Ont., May 27, 1843.

T. M. Fallon, City Passenger and Ticket Agent, Rutland Rd., Montreal, born there May 26, 1875.

E. T. Galt, President Alberta Ry. and Irrigation Co., Montreal, born at Sherbrooke, Que., May 24, 1850.

A. Hardy, Storekeeper, Quebec and Lake St. John Ry., Quebec, born there May 12, 1855.

C. M. Hays, 2nd Vice-President and General Manager G.T.R., and President G.T. Pacific Ry., Montreal, born at Rock Island, Ill., May 16, 1856.

R. B. Hepburn, President and General Manager Ontario and Quebec Navigation Co., Picton, Ont., born there May 27, 1876.

W. T. Huggan, Accountant and Auditor, Prince Edward Island Ry., Charlottetown, P.E.I., born at Halifax, N.S., May 24, 1851.

W. S. Kinnear, Assistant General Manager Michigan Central Rd., and Chief Engineer Detroit River Tunnel, Detroit, Mich., born at Circleville, Ohio, May 25, 1864.

M. Neilson, C.E., Consulting Engineer, Montreal Street Ry., born at Almonte, Ont., May 26, 1852.

A. L. Ogilvy, General Purchasing Agent, National Transcontinental Railway Commission, Ottawa, Ont., born at Richwood, Oxford County, Ont., May 23, 1868.

N. J. Power, General Auditor, G.T.R., Montreal, born at Rochester, N.Y., May 19, 1843.

Hayter Reed, Manager-in-Chief C.P.R. hotels, Montreal, born at L'Orignal, Ont., May 26, 1849.

H. B. Sherwood, Superintendent Bay of Quinte Ry., Napanee, Ont., born at Auburn, N.Y., May 25, 1847.

E. Tiffin, General Traffic Manager I.C.R., Moncton, N.B., born at Hamilton, Ont., May 5, 1849.

J. H. Walsh, General Manager Quebec Central Ry., Sherbrooke, Que., born at Quebec, May 12, 1860.

H. K. Wicksteed, Chief Engineer of Location, Mackenzie, Mann & Co., Ltd., Toronto, born at Quebec, May 25, 1855.

James Yeo, ex-Roadmaster Intercolonial Ry., Riviere du Loup, Que., born at Bideford, Devonshire, Eng., May 1, 1830.

J. A. Yorick, Canadian Passenger Agent, Chicago, Burlington and Quincy Rd., at Toronto, born at London, Ont., May 7, 1872.

G.T.R. SEMI-ANNUAL REPORT.

At the semi-annual meeting held in London, Eng., April 8, the directors' report for the half-year ended Dec. 31, 1907, was presented. Following is a comparison of the half-year's revenue accounts with those of the half year ended Dec. 31, 1906:

Dec. 31, 1906.		Dec. 31, 1907.		
£3,584,846	Gross receipts	£ 3,763,246	4	1
	Deduct—			
2,561,496	Working expenses, being at the rate of 72.03%, as compared with 71.45% in 1906.	2,710,933	13	9
£ 1,023,350	Net traffic receipts	£1,052,312	10	4
	Add—			
16,013	Received from International Bridge Co.	16,012	16	7
1,323	Interest on Toledo, Saginaw, and Muskegon bonds	899	11	4
6,507	Interest, Central Vermont Ry. bonds	6,506	14	3
66,491	Interest on securities of controlled lines and on St. Clair tunnel bonds acquired by issue of G. T. 4% debenture stock	66,491	8	4
42,441	Balance of general interest account	52,171	4	8
£1,156,125	Net revenue receipts	£1,194,394	5	6

Following are the net revenue charges for the half-year, compared with the corresponding period:

Dec. 31, 1906.		Dec. 31, 1907.		
£ 77,603	Rents (leased lines)	£ 77,603	0	9
488,746	Interest on debenture stocks and bonds of the Co.	492,278	15	11
47,657	Interest on debenture stock and bonds of lines consolidated with the G.T. Co.	42,757	6	8
34,263	Canada Atlantic Ry. deficit.	60,364	9	8
£ 648,269		£ 673,003	13	0
15,609	*Deduct*—Detroit, Grand Haven, and Milwaukee surplus	5,785	0	0
£ 632,660		£ 667,218	13	0
523,465	Leaving a surplus of	527,175	12	6
£1,156,125		£1,194,394	5	6

Adding the balance of £14,640 5s. 3d. at the credit of net revenue account on June 30, 1907, to the above surplus for the past half-year the total amount available for dividend is £541,815 17s. 9d., from which the directors recommend the payment of the following dividends:

Half-year's dividend on the 4% guaranteed stock	£ 171,492	9	1
Half-year's dividend on first preference stock	85,420	15	0
Half-year's dividend on second preference stock	63,210	0	4
Half-year's dividend of 3% on third preference stock	214,939	1	6
	£ 535,062	5	11

leaving a balance of £6,753 11s. 10d. to be carried forward to next half-year's account.

Following is a comparison of receipts for the half-years ended Dec. 31, 1907 and 1906.

Description of receipts.	1907.	1906.	Increase.	Decrease.
	£	£	£	£
Passengers	1,162,593	1,120,305	42,288	....
Mails and express	174,604	172,504	2,100	....
Freight and live stock	2,347,182	2,214,744	132,438	....
Miscellaneous	78,867	77,293	1,574	....
	£3,763,246	£3,584,846	£178,400	....

TRAFFIC STATISTICS.

	1907.	1906.	Increase.	Decrease.
Passengers carried	6,291,396	6,046,070	245,326	...
Average fare per passenger	44.35d.	44.47d.	....	0 12d.
Tons of freight and live stock	8,881,347	8,318,075	563,272	...
Average rate per ton	63.43d.	63.90d.	....	0.47d.
Tons carried one mile	1,710,193,134	1,598,546,752	111,646,382	....
Earnings per train mile	85.81d.	86.52d.	.	0 71d.

The average rate per ton per mile on the entire freight business was 0.67 of a cent, which was the same as in the corresponding half-year.

The working expenses, excluding taxes, were £2,646,670, or 70.32% of gross receipts, compared with £2,489,611, or 69.45% in the corresponding half-year; an increase in amount of £157,059, and of 0.87% in the proportion to the gross receipts.

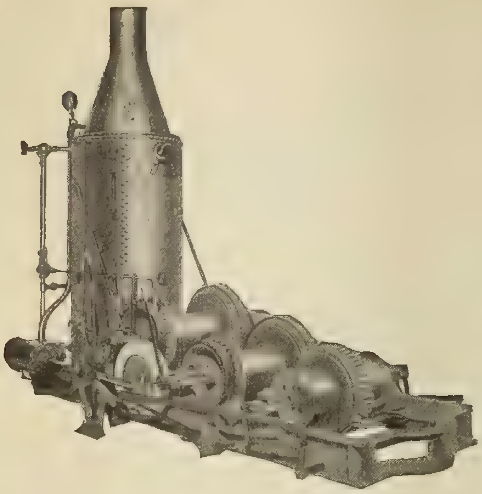
Following is a comparison of the revenue expenditure, including taxes, for the half-years ended Dec. 31, 1907 and 1906:

Description of expenditure.	1907.	1906.	Increase.	Decrease.
	£	£	£	£
Maintenance of way and structures	583,457	513,674	69,783	....
Maintenance of equipment	538,968	694,215	....	155,247
Conducting transportation	1,445,413	1,209,739	235,674	....
General expenses	78,833	71,983	6,850	....
Taxes	64,263	71,885	....	7,622
Total	£2,710,934	£2,561,496	£149,438	....
Percentage of gross receipts	72.03	71.45	0.58	....
Expenditure per train-mile	61.82d.	61.82d.	...	....

The train mileage of the half-year compares with that for the half-year ending Dec. 31, 1906, as follows:

Description of mileage.	1907.	1906.	Increase.	Decrease.
Passenger	4,622,481	4,434,957	187,524	....
Freight	5,654,836	5,197,835	457,001	...
Mixed trains	248,005	310,848	...	62,843
Total	10,525,322	9,943,640	581,682	....

From the foregoing statements it will be observed that the gross receipts for the



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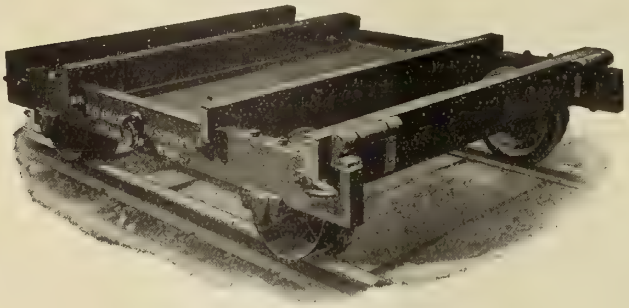

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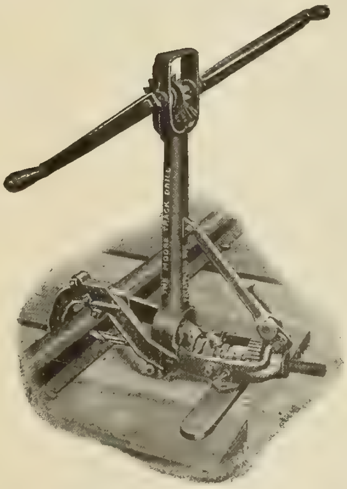

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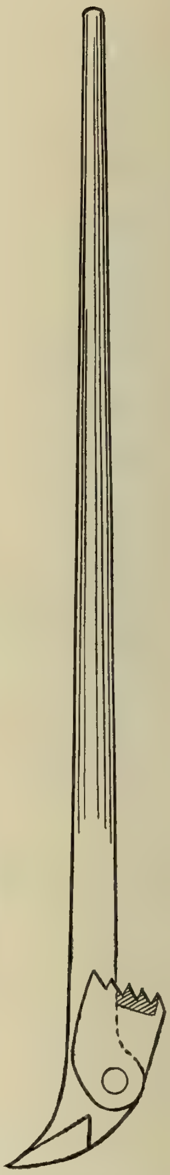

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Track Gauges, Track Levels, Track Tools of All Kinds half-year show an increase of £178,400, or 4.98%; the working expenses, including taxes, an increase of £149,438, or 5.83%; and the train mileage an increase of 581,682, or 5.85%.

The total charges to capital account for the half-year were £293,900 9s. 11d. Of this £6,208 17s. 9d. was discount and commission on 4% guaranteed stock issued during the half-year, less premium on 4% debenture stock sold and issued in exchange for Midland of Canada sectional bonds The actual expenditure on capital account was: new works £119,534 6s. 6d., double track £78,037 10s. 6d., new rolling stock £75,588 5s. 8d., land purchased £14,531 9s. 6d., total £287,691 12s. 2d.

Rolling stock was increased during the half-year by the purchase of 55 furniture cars and 465 box cars, the cost, £75,588 5s. 8d., has been charged to capital account. Forty-five freight engines, 18 first-class, 7 second-class, 5 baggage, 354 refrigerator, 433 flat, 28 caboose, and 32 dump cars were purchased; and 6 ten-wheeled passenger engines, 10 switch engines, 6 first-class, 10 baggage, 15 caboose, and 13 flat cars were built in the company's shops during the half-year on revenue account.

The gross receipts of the Canada Atlantic Ry. for the half-year were £244,147, against £225,353 in 1906, and the working expenses were £242,409, against £197,513, leaving a net revenue balance of £1,738, against £27,840, a decrease of £26,102, compared with the corresponding period of 1906. The net revenue charges for the half-year were £62,103, so that there was a net revenue deficiency of £60,365. The number of passengers carried during the half-year was 280,844, against 262,366, an increase of 7.04%, and the passenger train receipts, including mails and express receipts, were £56,973, against £53,811, an increase of 5.87%. The quantity of freight moved was 1,137,372 tons, against 831,410 tons in 1906, an increase of 36.80%; the receipts from freight traffic were £181,193, against £165,939, an increase of 9.19%.

The gross receipts of the G.T. Western Ry. for the half-year were £683,757, against £638,222 in 1906, and the working expenses were £578,802, against £537,112, leaving a net profit of £104,955, against £101,110, an increase of £3,845, compared with the corresponding period of 1906. The net revenue charges for the half year were £88,970, against £83,858, so that there was, Dec. 31, a net revenue credit of £15,985, which is carried forward, as compared with £17,252 for the corresponding half-year of 1906. The number of passengers carried during the half-year was 953,235, against 928,026, an increase of 2.72%, and the passenger train receipts, including mails and express receipts, were £230,649, against £222,071, an increase of 3.86%. The quantity of freight moved during the half-year was 1,842,873 tons, against 1,667,419 tons, an increase of 10.52%, and the receipts from this traffic were £452,606, against £415,560, an increase of 8.91%.

The gross receipts of the Detroit, Grand Haven, and Milwaukee Ry. for the half-year were £206,671, against £196,093 in 1906; the working expenses were £163,156, against £144,110, thus leaving a balance of £43,515, against £51,983, a decrease in net revenue of £8,468, compared with the corresponding half-year of 1906. The net revenue charges for the half-year were £37,730, against £36,373 in 1906, so that there was a net revenue surplus of £5,785, as compared with £15,610 for the corresponding period of 1906. The number of passengers carried during the half-year was 440,979, against 420,089, an increase of 4.97%; and the passenger receipts, including mails and express receipts, were £73,778, against £67,678, an increase of 9.01%. The quantity of freight moved was 844,891 tons, against 821,097 tons in 1906, an increase of 23,794 tons, 2.90%; and the receipts from freight traffic were £127,356, against £124,386 in 1906, an increase of £2,970, or 2.39%.

The continued increase in traffic receipts, which had marked the company's progress for a lengthened period, began gradually to diminish in Oct., as the result of a bad harvest in Canada and of the severe financial crisis in the U.S., until in the middle of Dec., the weekly returns began to show, for the first time since 1904, a marked decrease as compared with those of the corresponding period. In view of these circumstances stringent measures are being taken by the management to restrict, so far as is consistent with the interests of the company, all expenditure in the different departments so long as the present depression of business continues.

Satisfactory progress has been made in the construction work of the G.T. Pacific Ry., taking into consideration the scarcity of labor during the past season, and the difficulty of obtaining supplies of materials. 356 miles of track have been laid between Winnipeg and Edmonton, and it is expected that this portion of the line, 793 miles, will be completed during the ensuing summer. Contracts have been let for the line between Edmonton and Wolf's Creek, 123 miles, the end of the prairie section, and on the mountain section from Prince Rupert, the Pacific terminus, eastward for about 100 miles, and contracts will shortly be let for about 200 miles of the mountain section westward from Wolf's Creek. Track has been laid on 120 miles of the total length of 200 miles of the Lake Superior branch The whole of the funds estimated at the amount to be provided on the guarantee of the G.T. Co. for the construction of the prairie and mountain sections, and of the Lake Superior branch, have been raised, with the exception of £696,000, which it is not considered will be required for a considerable period.

The Hon. N. C. Rothschild has resigned from the board, and the directors have elected M. G. Carr-Glyn to fill the vacancy. The retiring directors are Sir C. Rivers-Wilson, and J. A. Clutton-Brock, who are eligible and offer themselves for re-election. F. Whinney, one of the auditors in London, and C. Percy, one of the auditors in Canada, also retire and offer themselves for re-election.

REPORTS OF OFFICIALS.

The Chief Engineer, H. G. Kelley, states that the length of the G.T.R. maintained and operated during 1907 was the same as for 1906, viz., 3,535 miles. The new second track constructed between Lynden and Brantford, Ont., was opened for traffic Sept. 29, 1907. A new second track is in course of construction between St. Lambert and St. Rosalie, Que., to accommodate the increased traffic between Montreal and the latter point. The new double-track bridge across the River Thames, at the Cove, west of London, Ont., where other improvements have been carried out in connection with the double-tracking of the line between London and Hyde Park, was completed in March last. The expenditure during 1907 on the permanent way and structures, was $4,239,490.35, against $3,899,881.83 in 1906, being an increase of $339,608.52. The outlay on the track and permanent way, including ballast and ballasting, clearing snow, renewals of rails and ties, also including their proportion of the cost of superintendence, was $2,899,532.42 in 1906, or at the rate of $820.24 per mile; in 1907 it was $3,047,731.90, or at the rate of $862.16 per mile, an increase of 5.11%, caused principally by the increased rates of wages paid to track employes, and cost of clearing snow. The cost of repairs and renewals of buildings and fixtures amounted to $760,297.32 in 1907, compared with $565,222.56 in 1906, an increase of slightly over 34%. New stations have been built at Gorham, Ste. Madeleine, Victoria Harbor, Toronto Jct., Brampton, St. Mary's, Clarksons, Eastwood, Canfield, Ayton, Hanover, Cargill, Kincardine, Exeter, Aberarder, Oakville, Thamesville, Paynes, Tillsonburg Jct., Moulton, Amigari and Pontiac—22 stations in all. The materials used for renewals and repairs of main track and sidings were:

New steel rails laid in track	47,443 tons
Re-rolled steel rails laid in track	220 "
Partially-worn steel rails laid in branch lines and sidings	9,490 "
New ties placed in track	1,094,856
Ballast (cubic yards)	347,488

The Superintendent of Motive Power, W. D. Robb, reports expenditure, mileage, etc., as follows:

Half-year ended.	Total expenditure.	Train mileage.	Rate of expenses per mile.		
			Train	Engine	Car.
			Cents	Cents	Cents
Dec. 31/07 ..	$4,817,989	10,525,322	45.78	34.84	2.93
Dec. 31/06 ..	4,574,141	9,943,640	46.00	35.43	2.95

An increase in expenditure of $243,848, or 5.33% compared with an increase in train miles of 581,682, or 5.85%.

	Passenger Trains	Freight Trains	Mixed Trains.
The average number of cars moved per train was	4.8	24.8	6.9
And for the corresponding period	4.8	25.2	7.9

During the half-year 22 locomotives were sold, and 2 engines were scrapped, leaving at the end of the half-year 70 old light capacity engines set aside to be scrapped. Of the engines sold 10 were purchased by the G.T. Western Ry., and 12 by the G.T. Pacific Ry. Six ten-wheel passenger engines and 10 switch engines were turned out new at the company's works, Montreal, and 30 compound consolidation freight engines and 15 mogul freight engines were purchased, delivered, and put into service during the half-year.

The comparative cost of repairs per train, engine and car mile was:

Cost per mile.	Repairs and renewals of locomotives.		All repairing charges, including shop, machinery, tools, and marine equipment, etc.	
	1907.	1906.	1907.	1906.
	Cents.	Cents.	Cents.	Cents.
Train	10.24	15.17	12.66	17.32
Engine	7.79	11.69	9.64	13.34
Car	0.66	0.97	0.81	1.11

The Superintendent of Car Department, J. Coleman, reports expenditure, mileage, etc., as follows:

Half-year ended.	Total cost of repairs and renewals.	Total miles run by cars.			Cost per mile.	
		Passenger.	Freight.	Total.	Car.	Train.
					Cents.	Cents.
Dec., 1907.	$1,290,069	22,871,821	141,668,021	164,539,842	0.784	12.26
" 1906.	1,655,835	21,968,838	132,975,561	154,944,399	1.069	16.65

A decrease in expenditure of $365,766, or 22.09%, with an increase in car miles of 9,595,443, or 6.19%. One official, 5 first-class, 10 baggage, 15 caboose, and 13 flat cars, also 3 rapid unloaders, were built new in company's works at cost of revenue, and 465 box and 55 furniture cars were purchased and charged to capital account, 18 first-

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Local Manager C.P.R. Telegraphs

JAMES POWELL - - *Vice-President*
Mechanical Engineer Motive Power Dept. G.T.R.
and Secretary Canadian Railway Club

G. E. BURNS, Freight Claims Agent C.P.R. A. E. ROSEVEAR, Assistant General Freight Agent G.T.R.
L. A. GLOBENSKY, Ex-Secretary Baie des Chaleurs Railway. THOS. WILLIAMS, Superintendent C.P.R.
General Counsel—J. C. WALSH, Esq., M.P. (of Walsh & Walsh)

Bankers—THE MERCHANTS BANK OF CANADA

class, 7 second-class, 5 baggage, 354 refrigerator, 433 flat, 28 caboose, and 32 dump cars, and 1 locomotive crane were purchased and charged to revenue.

The revenue account for the half-year follows:

RECEIPTS.

	£ s. d.	£ s. d.	£ s. d.
Passengers	....	1,171,644 1 8	
Less—			
International bridge tolls	1,596 5 3		
St. Clair tunnel tolls	7,455 0 0	9,051 5 3	1,162,592 16 5
Mails and express	....		174,603 12 8
Freight and live stock	....	2,445,485 18 6	
Less—			
Cartage, etc.	60,683 19 5		
International bridge tolls	12,590 5 5		
St. Clair tunnel tolls	25,029 11 1	98,303 15 11	2,347,182 2 7
Miscellaneous receipts, rents, tolls, etc.	....	....	78,867 12 5
			£3,763,246 4 1

EXPENDITURE

		£ s. d.
Maintenance of way and structures	15.50%	583,456 18 5
Maintenance of equipment	14.32%	538,967 15 6
Conducting transportation	38.41%	1,445,412 18 8
General expenses	2.09%	78,832 11 0
Total working expenses	70.32%	2,646,670 3 7
Taxes	1.71%	64,263 10 2
	72.03%	2,710,933 13 9
Balance to net revenue account		1,052,312 10 4
		£3,763,246 4 1

* * *

The New England Passenger Agents' Association met at Waterbury, Vermont, early in April, and, under the guidance of J. W. Hanley, General Passenger Agent of the Central Vermont Ry., had an exceedingly pleasant experience, including a visit to a sugar camp, which was made in wagons drawn by oxen, and a dance at the Inn. Among those present were G. T. Bell, G.P. & T.A., Grand Trunk Ry.; A. A. Heard, General Passenger Agent, Delaware & Hudson Co.; Mrs. G. C. Jones, wife of the General Manager of the Central Vermont Ry., and A. C. Stonegrave, Canadian Freight and Passenger Agent, Central Vermont Ry.

Railway Taxation in Manitoba.—The act to amend the Railway Taxation Act, passed at the recent session of the Manitoba Legislature, provides that sec. 19, of chap. 166, of the Revised Statutes of 1902, shall be considered and construed as applying and having applied to Portage la Prairie, from and after its incorporation as a city. Sec. 2 provides that the Railway Taxation Act shall not be construed to exempt from taxation, by any municipality, any land or real estate situate therein not used for railway purposes by a railway company, which is conveyed to and held by and in the name of a trustee in trust for any railway company, or filed or registered in any land titles office or registry office, in which deed the trust for the railway is not disclosed, and of which trust the municipality has not had notice at the time of making an assessment of such land or real estate so held in trust. The third section provides that the two sections quoted shall be considered as having been passed and in force prior to and during 1901.

Railway Capital, Subsidies, Etc.

The Department of Railways statistical report for the year ended June 30, 1907, contains a large amount of information relative to capital invested in Canadian railways, and to the subsidies granted, which has not been previously available in the same form. The table giving the capitalization of railways, shows that the total capital invested in railways was $1,171,937,808, divided as follows: Capital stock outstanding, $588,563,591; bonds outstanding, $564,824,966; miscellaneous obligations, $4,717,195; income bonds, $5,192,757; equipment trust obligations, $8,634,299.

This table contains the titles of 172 companies, in regard to all of which, however, figures are not given. The name of the Credit Valley Ry. appears, but its capital and funded debt are returned under the Ontario and Quebec Ry., and there are other similar instances. No capital returns are given in the following cases: Nova Scotia Steel and Coal Co., value of line included in general capital of the company, which cannot be divided; New Brunswick Coal and Ry. Co., operated by New Brunswick Government Commission; Sydney and Louisburg Ry., value included in general capital of the Dominion Coal Co.; Temiskaming and Northern Ontario Ry., constructed and operated by the Ontario Government Commission, and the Government railways—Intercolonial Ry. and Prince Edward Island Ry. The following lines are also included as being under construction: Atlantic, Quebec and Western Ry., total capital outstanding, $1,527,101; Brandon Transfer Co., $12,600; Burk's Falls and French River Ry., $125,000; Central Ry. of Canada, $526,000; Grand Trunk Pacific Ry., $60,015,671; Huron and Ontario Ry., $3,150,000; Indian River Ry., $15,000; International Ry. of New Brunswick, $2,216,000; Pacific, Northern and Ominica Ry., $60,000; Quebec Bridge and Ry. Co., $5,282,038; Quebec and New Brunswick Ry., $387,900; St. John Valley and River du Loup Ry., $34,932; Trans-Canada Ry., $37,700.

The amount of capital is below that heretofore reported, for the reason that in preceding years the cost of the Dominion and Ontario Government railways, this year aggregating $100,958,402, and aid from all sources were included with capital. The Department's report for the year ended June 30, 1906, showed a total capital of $1,332,498,705, including: Dominion and Provincial bonuses paid, $216,853,117; Dominion and Provincial loans paid, $20,613,489; Provincial subscriptions to shares paid, $300,000; municipal aid paid, $17,125,164. The net earnings for all railways of $42,989,537.41, represents a rate of 3.66% on the capital indicated. Deducting the 1,890 miles of Government lines, the capitalization of railways in Canada is $56,995 per mile. The cost of Government built, owned and operated lines in Canada is $53,417 a mile; the Dominion railways having cost $51,590, and the Ontario Government railway $76,047 a mile. These figures as to the cost of the Temiskaming and Ontario Ry. are disputed by the Treasurer of Ontario, who says that the Comptroller of Statistics averaged the whole expenditure on about 265 miles of line on the 139.9 miles which were then under operation. The Treasurer advises us that he cannot tell as yet what the expenditure on the completed road will be, but that apart from rolling stock, it should be less than $50,000 a mile, instead of $76,047, as stated by the Comptroller, and that including rolling stock and terminals it should not, at the most, exceed $55,000 a mile, and that it may be less. It would appear that the Comptroller of Statistics took the T. & N.O. Ry.'s general balance sheet, including all capital expenditures, $10,570,549.51, and divided it by 138.9, which gives, approximately, $76,047. The general balance sheet includes amounts expended on construction, as well as on the line in operation.

GOVERNMENT AND MUNICIPAL AID.

A careful analysis has been made during the year of the accounts showing what aid has been given to Canadian railways. The inquiry, says the Comptroller of Statistics, revealed a good deal of confusion. It was found that the returns made did not agree with the official statements of actual payments, for example, by the provinces. This did not necessarily imply inaccuracy. In some instances bonds had been given and charged up by the provinces on the basis of liability involved, while the railways reported the actual proceeds. In other cases the provinces entered up as railway aid the amounts expended on exploratory and survey work—not improperly—while the railways merely charged themselves with the direct subsidies received. Thus one account could not be checked accurately against the other. The Comptroller says that Dominion aid of $128,827,648.77; Provincial aid of $35,125,130.80, and municipal aid of $17,346,633.34, may be said to fairly represent the situation with regard to railway aid. The amount credited to the Dominion is considerably reduced from that which has heretofore been published, the amount given in the 1906 report being $216,853,117. The cost of the Intercolonial Ry. and the Prince Edward Island Ry. has been excluded, but other large amounts have been added. For example, $10,189,521 paid to the C.P.R. in 1886 in exchange for 6,793,014 acres of land, which payment must be regarded as merely varying the terms of the original subsidy agreement, by which the railway got more cash and less land, is now included. For some reason the annual subsidy paid to the same company on that portion of the short line in the State of Maine, as well as $6,639,581 charged against surveys in connection with that section of the C.P.R. constructed by the Government, had been left out. It was also discovered that a payment by the Department of Finance of $119,700 a year since 1884, to the Quebec Government, on subsidy account in connection with the building of the lines between Quebec and Montreal, and between Montreal and Ottawa, had been omitted. With the exception of the last mentioned, these items are now included in the total aid for 1907. The figures given under the heading of Provincial aid does not include $10,570,549, the reported cost of the Temiskaming and Northern Ontario Ry.

The land grants earned from the Dominion Government to June 30, 1907, totalled 31,762,954 acres, distributed as follows: Alberta Ry. and Irrigation Co., 1,114,368 acres; Calgary and Edmonton Ry., 1,888,448 acres; Canadian Northern Ry., 3,321,408 acres; C.P.R. main line, 18,206,986 acres; C.P.R., Pipestone extension, 200,320 acres; C.P.R., Souris branch, 1,408,704 acres; Great North-West Central Ry., 320,000 acres; Manitoba and North-Western Ry., 1,501,376 acres; Manitoba and South-Western Colonization Ry., 1,396,800 acres; Manitoba and South-Eastern Ry., 680,320 acres; Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co., 1,625,344 acres; Saskatchewan and Western Ry., 98,880 acres. Patents have been issued for a total of 26,542,003 acres of the land grants earned. The provinces have also given generous grants of land to aid railway construction, and an effort has been made to get at the facts. From official sources the Department has learned that the total area thus given by Quebec aggregates 13,324,950 acres, which has been converted into money on the basis of 52½ cents an acre. This would yield $6,995,598.75, of which there has been actually paid, $4,557,728.02. British Columbia has alienated 5,287,387 acres in aid of five lines of railway; New Brunswick has granted 1,647,772 acres, and Nova Scotia,

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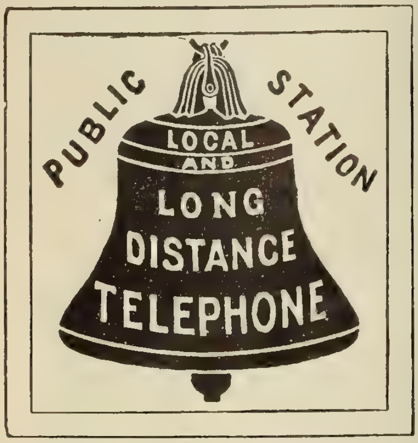
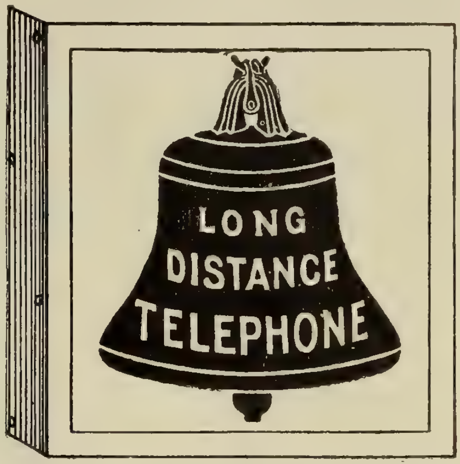
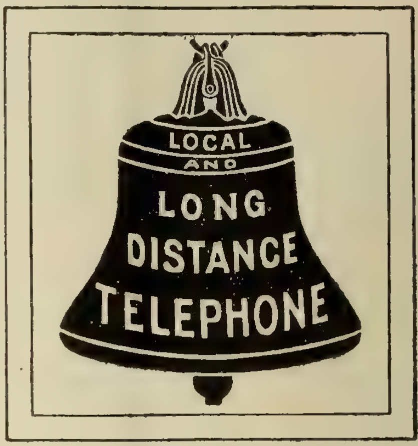


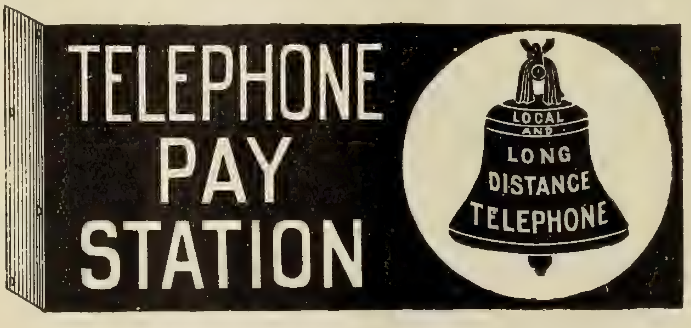
No. 1. Single, 17 x 18 inches. If made double with flange 18½ x 18 inches.



No. 4. Double, 18½ x 18 inches, including flange. If made single, without flange, 17 x 18 inches.

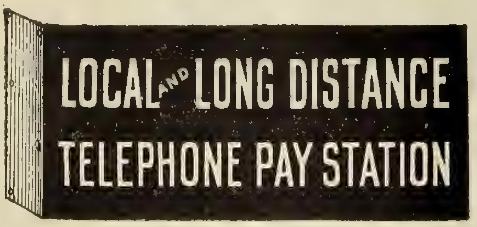


No. 2. Single, 17 x 18 inches. If made double, with flange, 18½ x 18 inches.



No. 5. Double, 19½ x 8 inches, including flange. If made single without flange, 18 x 8 inches.

No. 6. Double, 19½ x 8 inches, including flange.



No. 7. Double, 19½ x 8 inches, including flange. If made single, without flange, 18 x 8 inches.

No. 3. Single, 6½ x 7½ inches.

No. 8. Single, 18 x 8 inches.

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160,000 acres. These give a total of 52,183,063 acres granted by the Dominion and the provinces. The Dominion Government and the various Provincial Governments have guaranteed the bonds of railway companies to the extent of many millions of dollars. Just what the liability may be in this regard has not been definitely ascertained.

A table attached to the report shows that the following railways have been constructed without Government or municipal aid, the mileage being ascertained from another table: Bedlington and Nelson Ry., 16.58 miles; Brandon, Saskatchewan and Hudson's Bay Ry., 76.18 miles; British Yukon Ry., 90.32 miles; Kaslo and Slocan Ry., 31.73 miles; Kettle River Valley Ry., 3.50 miles; Liverpool and Milton Ry., 5.53 miles; Montreal and Vermont Junction Ry., 25.60 miles; Morrissey, Fernie and Michel Ry., 10.85 miles; Nelson and Fort Sheppard Ry., 60.12 miles; New Westminster Southern Ry., 25.78 miles; Nosbonsing and Nipissing Ry., 6.75 miles; Princeton Branch Washington County Ry., 5.22 miles; Red Mountain Ry., 13.52 miles; Rutland and Noyan Ry., 3.89 miles; Stanstead, Shefford and Chambly Ry., 46.23 miles; Vancouver, Victoria and Eastern Ry., 88.88 miles; Vancouver, Westminster and Yukon Ry., 19.96 miles; Victoria Terminal Ry. and Ferry Co., 19.88 miles; Wellington Colliery Co., 28.63 miles. Total 579.15 miles.

Canadian Northern Ry. Construction.

Canadian Northern Quebec Ry.—Orders have been made by the Board of Railway Commissioners authorizing the construction of bridges over the Jordan River, near St. Sophie station, and over the River Rouge, near Montcalm station, Que., on the Joliette-Hawkesbury section of the old Great Northern Ry.

Canadian Northern Ontario Ry.—The Ontario Legislature at the recent session passed an act guaranteeing the bonds of the C.N.O. Ry. Co. for about $2,500,000, being for four branch lines having a total length of about 50 miles, at $20,000 a mile, and for about $1,500,000 for terminals at Key Inlet, Ont., and Toronto, the guarantee to be consolidated with that given by the Government in 1904, which covered 265 miles of railway at the rate of $20,000 a mile. The branch lines constructed or to be constructed, for which the Government guarantees bonds at the rate of $20,000 a mile, are as follows: From Sudbury to Moose Mountain; a branch to the Garrow mines, about four miles; a branch to Key Inlet on Georgian Bay, and a branch from near Udney into Orillia, a distance of about ten miles. The new guarantee is to be secured by a first mortgage of the lines to be constructed. The guaranteed bonds are to cover the expenditure already made upon the terminals at Key Inlet, on Georgian Bay, and upon the terminals in Toronto, and for 65% of the future expenditure, the entire guarantee on terminals not to exceed $1,500,000.

It is expected that construction upon the branch line from Udney to Orillia will be undertaken this season. Surveys have already been made, not only between these two points, but between Orillia and the Georgian Bay, to which point the company secured the right to construct a branch line at the current session of the Dominion Parliament.

Canadian Northern Ry.—D. B. Hanna, Third Vice-President, stated in Winnipeg, April 7, that the improvements to be made upon the line during the current year would include the relaying of the main line between Port Arthur, Ont., and Winnipeg, Man., with 80-lb. steel rails. The lines west and north of Winnipeg will also be generally improved, according to the statement made by M. H. McLeod, General Manager, upon his return to Winnipeg, April 10, after having completed an inspection of the same. It was impossible, he said, to give out any statement as to the extensions of existing lines, or any changes that might be made, as nothing had been definitely decided.

A second bridge is to be built over the Assiniboine River at Winnipeg, during the present season. It will be of steel on concrete abutments, and will be used mainly by passenger trains, so that the present bridge a little further east may be devoted to freight traffic.

Tenders are under consideration for the construction of the new station which the C.N.R. Co. is to construct at Winnipeg, for the joint use of the G.T. Pacific Ry. and itself. The station will face Main St., opposite Broadway, and will have a frontage of 358 ft. by 140 ft. It will have a height of four stories above the basement, with a large dome in the centre, which will reach 100 ft. above the building proper. In the centre of this dome will be a large skylight, which will let in light to waiting-room, to be located below. The building will be of massive appearance, and of plain architecture, the whole being built with a view to utility rather than beauty.

Plans are being prepared for the erection of a new passenger station at Brandon, Man. The line between Brandon and Regina, Sask., which was completed in 1907, will be fully ballasted and surfaced during the current season, and a train service put on.

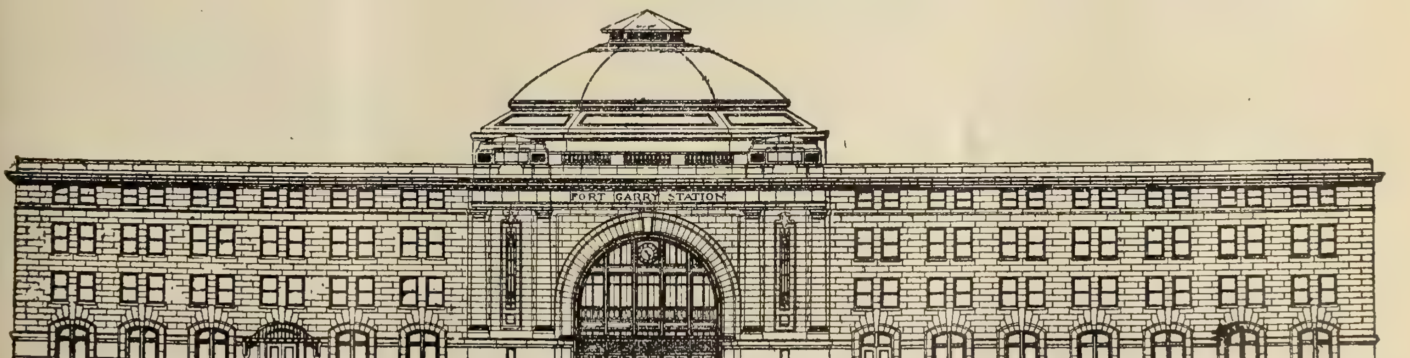
With regard to the line to the Goose Lake district, Sask., on which considerable grading was done during 1907, M. H. McLeod, General Manager, told a deputation recently that ties and steel would be delivered at an early date, and tracklaying gone on with as soon as possible.

Edmonton and Slave Lake Ry.—An order approving a change in location of this railway in tps. 54 and 55, range 25, west of the 4th meridian, has been passed by the Board of Railway Commissioners.

The company was originally incorporated by the Dominion Parliament in 1899, to construct a railway from Edmonton to the navigable waters of Slave Lake, and acts subsequently passed have granted extensions of time for construction. Plans were filed in June, 1904, at the head office, Edmonton, Alta., for the first 50 miles of the line, extending from the Edmonton, Yukon and Pacific Ry. near the Groate estate northwesterly to St. Albert, thence northerly to near Edison and Independence Settlements about half way to Athabasca Landing. Track was laid to Morinville, 21.50 miles, in 1906, and a train service is being operated over the line, which is described as the Morinville branch of the Canadian Northern Ry. The C.N.R. maps show the completed portion of the line, and its extension to Athabasca Landing (marked as being under construction), as a C.N.R. branch. (Sept., 1907, pg. 663. See also Canadian Northern Ry. Construction, Dec., 1906, pg. 723, etc.)

Edmonton, Yukon and Pacific Ry.—Survey parties are being organized by M. H. McLeod, General Manager and Chief Engineer C.N.R., to be placed in the field at various points between Edmonton, Alta., and the Pacific coast, for the location of this line. It is generally understood in Edmonton, that the route which it is proposed to follow will pass through British Columbia about midway between the C.P.R. and the G.T. Pacific Ry. The point at which the line will reach the Pacific Coast has not been seriously discussed, but Bella Coola and Bute Inlet are favorably mentioned. In regard to the latter point detailed reports of the topography of the district were made by engineers in connection with the preliminary surveys for the C.P.R. many years ago, under the direction of Sir Sandford Fleming, then Chief Engineer. The company has also power to construct a branch line from the main line to Burrard Inlet. Preliminary surveys, previously made, traverse a portion of the coal belt in the northern Cariboo district, and press reports state that Mackenzie, Mann & Co. have secured, or are negotiating for, a number of coal areas there in the vicinity of the Bear River.

The E.Y. and P.R. Co. constructed the line from Strathcona into Edmonton, 4.50 miles, and there was completed during 1906, about 21 miles of line, from Edmonton to Stony Plains, which is operated as the C.N.R. Stony Plains section. The C.N.R. map shows a projected extension of this line as far as the eastern boundary of British Columbia, passing south of Jasper House, Alta., and a projected line from Edmonton, northwesterly to the B.C. boundary crossing the McLeod, Smoky and Wapti rivers.



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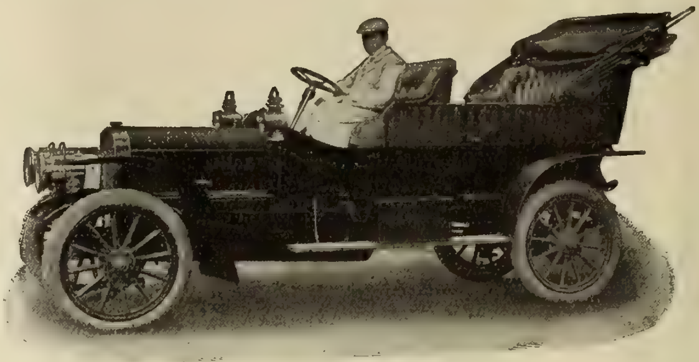

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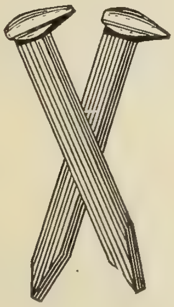
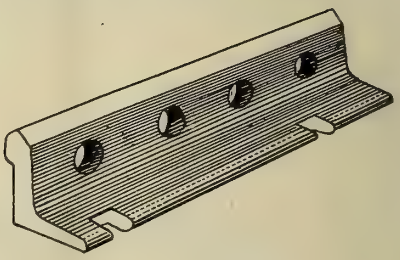


AXLES

CAR AND LOCOMOTIVE

Railway Angle Bars and
Track Spikes



FORGINGS MARINE AND RAILROAD

Pig Iron, Iron and Steel Bars

Railway Rolling Stock Statistics.

The portion of the report of the Department of Railways for the year ended June 30, 1907, devoted to rolling stock is much more complete than in previous years. It contains details which in previous years have been disregarded, the result being as, the Comptroller of Statistics, says: "Encouraging but puzzling." Comparing the returns for 1906 with those for 1907, the total figures are:

	1907.	1906.	Increase.
Locomotives	3,504	2,931	573
Freight Cars	113,514	96 565	16,949
Passenger Cars	3,642	3,319	323

The "puzzle," says Mr. Payne, arises when an attempt is made to ascertain whence these additional cars have come. Adding together the total car production of the country and the importations of the year—from which should be deducted the number broken up—there are several thousand cars to be accounted for. The same thing is true of locomotives. In this situation two explanations are suggested: The railways may have underestimated their supply of equipment for 1906, or they may have over-estimated their stock on hand for 1907. The Comptroller of Statistics is inclined to adopt the former view.

Regarding the locomotives, they were assigned to the following services: Passenger, 964; freight, 2,206; switching, 334; total, 3,504. Having regard to the volume of traffic this motive power would represent an average of one passenger locomotive for every 33,337 passengers carried, and one freight locomotive for every 28,951 tons of freight hauled. In freight equipment, the comparison by classes of cars yields the following result:

	1907.	1906.	Increase.
Box and stock	72,966	61,929	11,037
Flat	20,477	18,525	1,952
Coal	10,358	8,295	2,063
Refrigerator	1,917	1,655	262
Caboose	1,583	1,422	161
Other	6,213	4,739	1,474

The tables giving details of the various classes of rolling stock give the following additional details: Locomotives leased, 195; passenger cars, first class, 1,300; second class, 472; combination, 405; emigrant, 272; dining, 105; parlor, 63; sleeping, 212; baggage, express and postal, 782; other cars in passenger service, 31; total, 3,642. Freight cars—Box, 68,149; flat cars, 20,477; stock, 4,817; coal, 10,358; tank, 132; refrigerator, 1,917; other cars in freight service, 1,557; total, 107,407. Cars in company's service—Officers' and pay cars, 74; gravel, 2,049; derrick, 83; caboose, 1,583; other road cars, 2,318; total, 6,107. Total cars in service, 117,156; total cars leased, 7,932; cars in fast freight line service, 500.

The Ottawa and New York Ry. reported three locomotives, four passenger cars, 21 freight cars and eight road cars too late to be included in the table. In this table the names of 96 different companies are given, but in the concluding table, showing capacity, the names of 58 companies are given, and the totals of the different classes of cars do not agree with those given in the first table. The number and aggregate capacity of the different classes of freight cars are: Box, 66,934 cars of 1,848,980 tons capacity; flat, 20,118 cars of 535,167 tons capacity; stock cars, 4,731 cars of 122,550 tons capacity; coal cars, 10,060 cars of 291,638 tons capacity; tank cars, 132 of 2,623 tons capacity; refrigerator cars, 1,745 cars of 48,745 tons capacity; other cars, 1,820 of 59,200 tons capacity; total, 105,540, of 2,908,903 tons capacity.

An important section of the report on rolling stock deals with the answers received to a supplementary schedule sent out, among the questions asked being the following: (1) Have you a sufficient supply of motive power? (2) If not, how many additional locomotives do you require? (3) Have you an adequate supply of cars for freight traffic? (4) If not, what is the approximate shortage? (5) How many cars used in your freight car service were destroyed, worn out, disposed of or otherwise put out of commission during the year ended June 30, 1907?

One railway admitted in a definite way a shortage of motive power and car supply, and the Comptroller says: "It may be safely assumed that there is a considerable deficiency." We do not think the Comptroller was justified in arriving at this conclusion. At certain seasons of the year, when traffic is abnormal, there is no doubt a shortage of rolling stock, as there is under similar circumstances in every other country, but the leading Canadian railways have largely added to their rolling stock during the last few years, and at present many of the lines have a surplus. The public and the Comptroller of Statistics, who certainly should be impartial, look at the matter from the rush period standpoint only, and take no account of the periods when considerable rolling stock has to stand idle and unproductive.

The supply of cars in Canada was 5,218 for every 1,000 miles of railway, while in the U.S. there were 8,810 cars for every 1,000 miles. The average number of tons hauled per freight car in Canada was 594, against 888 in the U.S. More second, third and fourth tracks associated with density of traffic may in part account for this material difference; but there is also the implication that the maximum service is not being obtained in Canada out of the car supply actually available. The number of locomotives per 1,000 miles of railway in Canada was 156, compared with 232 in the U.S.

During the year, 16,949 freight cars were added to the total supply of Canada. But, says the Comptroller, it must not be assumed that the congestion of traffic was relieved to that extent. The M.C.B. Association depreciation on wooden cars establishes that life at 20 years, but adopting 25 years as the standard, it will be seen that 3,862 new cars would have been required in 1906-07 to replace those of the stock at June 30, 1906, which had been broken up or destroyed. There were 1,099 miles of new railway put into operation during the year, which would call for an equipment of 4,523 new cars. Allowing for a service of 594 tons per car, the 5,899,422 tons of additional freight handled in 1906-07 would require 9,932 new cars. Adding together the three figures indicated, it would appear that an addition of 18,317 freight cars was required in order to maintain normal conditions, or 1,368 more than were actually brought into use during the year. Assuming that the calculation with respect to the annual displacement of equipment is sound, it will be seen that for the current year, 4,540 freight cars and 145 passenger cars will be required in order to maintain the supply available in 1907. New cars will also be needed for the mileage of railway under construction.

It was definitely ascertained that during the year 13,352 freight and road cars, 397 passenger cars and 227 locomotives were constructed in Canada. This was probably the maximum producing capacity of the Canadian shops for the year. As considerable enlargements were being made to the plants the output for the current year will be increased. This is gratifying, and leads to the hope, adds the report, that the demands arising out of a swelling traffic and railway extension may be met entirely at home. There is this further fact to be taken into account, that at June 30, 1907, there were reported as being leased 7,932 cars as compared with 1,126 at June 30, 1906. These leased cars, which are included in the totals, did not come from the U.S., as the Customs returns show less than 500 cars brought into Canada during the nine months ended Mar. 31, 1907.

Referring to the capacity of the cars, the report concludes: "By a simple calculation it transpires that if all the cars (105,540 cars, having a capacity of 2,908,903 tons, reported by 58 railways) and they probably represent the available stock for commercial purposes—had been loaded to their full capacity, it would have required just 21.9 days to transport the 63,866,135 tons of freight handled during the year. The box cars alone would have required 34.6 days to perform the same service; while the box, flat and stock cars combined could have done the work in 26.6 days. This is, of course, a somewhat fanciful way of measuring the car service of the Dominion, and it must not be considered as having a direct practical bearing; but it at least serves to show that the present equipment of our railways is capable of handling a larger freight traffic than arose last year without creating a stringency. It is manifest that railway managers have been doing their best to meet the public requirements, and yet they have not been able to silence the shippers who have been clamoring for cars. It is obvious that the troubles of the railways have arisen as much from a shortage of motive power as from an inadequate supply of rolling stock, and the 573 locomotives added during the year have not entirely met this need. However, the producing capacity of Canadian shops has been so much enlarged within the past two years that it is probable our railways will be able to rapidly satisfy their requirements in this respect.

"It is, perhaps, not the legitimate function of the statistician to consider, except in a very general way, the aspects of the car question; and yet it is manifest that there have been causes at work quite beyond the control of the railways. The Lord's Day Act has undoubtedly aggravated the situation. A. F. Dillinger, Operating Assistant to the Traffic Officer of the Board of Railway Commissioners, has recently reported with respect to complaints against the principal railway operating in the western provinces, and in that report he says: 'The effect of the Lord's Day Act upon the handling of traffic by the Company means a loss of 21% of its capacity, leaving 79% of the total capacity available.' This estimate is sustained by the testimony of railway managers in common. Applying it directly, it may be said that the effect of this measure is the equivalent of putting 23,838 freight cars out of commission, since that number is 21% of the total supply. The operations of the Manitoba Grain Act are also reported by Mr. Dillinger to have seriously hindered a satisfactory distribution of cars in the west, and the effect thereof has been sympathetically felt in the east. It is also clear that shippers have not increased their warehouse accommodation in keeping with the large expansion which has taken place during the past decade. Delays in loading and unloading have contributed to the congestion which has prevailed. These things cannot be disregarded in any effort that is made to locate the causes which have combined to create at times a distressing situation with regard to car supply. On the other hand, the railways must add very materially to their terminal, roundhouse, siding and repair facilities in order to bring about the relief that is being so urgently called for. It is not altogether a question of more locomotives and cars."

* * *

The J. H. Reynolds Construction Co., incorporated in Missouri, to carry on the business of general railroad contractors, has been licensed under the act respecting extra-provincial companies, to carry on its business in Ontario, utilizing not more than $50,000, and has appointed J. M. McNamara, North Bay, Ont., as its attorney. The company holds a sub-contract under the G.T. Pacific Ry. Co., for the construction of a section of the National Transcontinental Ry., 150 miles easterly from the Abitibi River.

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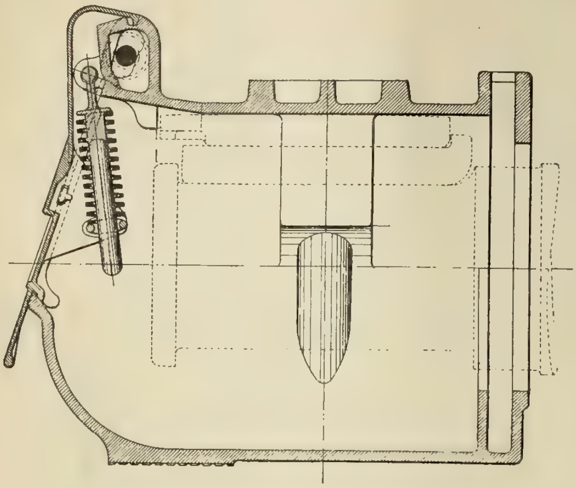

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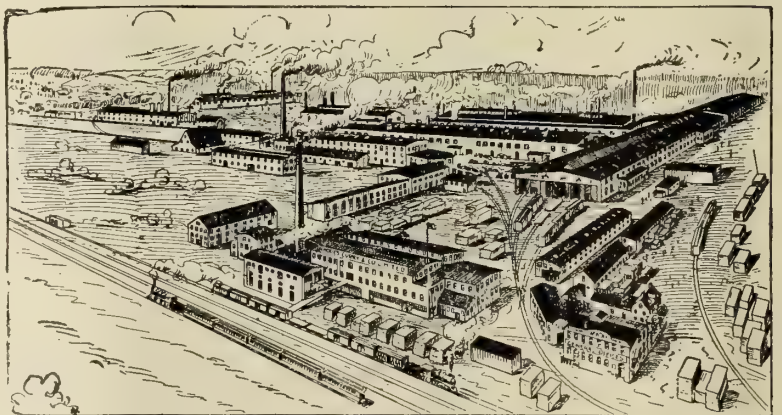

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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

4486. Mar. 11.—Authorizing Brantford & Hamilton Electric Ry. to construct its railway across the Hamilton stone road near Cainsville, Ont.

4487. Mar. 24.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to place its wires across Sandwich, Windsor and Amherstburg Electric Ry. at intersection of Aylmer and Wyandotte streets, Windsor, Ont.

4488. Mar. 24.—Authorizing C.P.R. to construct its railway across Third ave. and along Fourteenth St., Macleod, Alta., for about 400 ft.

4489. Mar. 12.—Authorizing G.T. Pacific Ry. to cross with its track, at rail level, the Canadian Northern Ry. near 21st St., Edmonton, Alta.

4490. Mar. 24.—Authorizing South Lambton Telephone Co-operative Association to place its wires across the Pere Marquette Ry. near Sombra Village, Ont.

4491. Mar. 24.—Authorizing G.T.R. to construct bridge over the Richelieu River at Belœil, Que.

4492. Mar. 24.—Authorizing C.P.R. to construct a branch line from the east side of Bethune Ave. to the east side of Glen Ave., and from the north side of Ann St. to the north side of St. Antoine St., Westmount, Que.

4493. Mar. 24.—Authorizing C.P.R. to build a spur line to the Standard Soap Co.'s premises at Calgary Jct., Alta.

4494. Mar. 24.—Authorizing J. M. Bergstrom to erect a telephone wire across the C.P.R. at Wauchope, Sask.

4495. Mar. 24.—Authorizing the C.P.R. to build an additional service track across Yonge St., Huntsville, Ont.

4496. Mar. 24.—Authorizing Brantford & Hamilton Electric Ry. Co. to place electric transmission wires over the G.T.R. at Cainsville, Ont.

4497. Mar. 24.—Authorizing C.P.R. to build a spur line to the Adams River Lumber Co.'s premises near Shuswap, B.C.

4498. Mar. 24.—Authorizing G.T.R. to take certain lands at St. Hubert, Que., for the purpose of moving its present station and placing thereon its passenger station. This order cancels order 4427 of Mar. 10.

4499. Mar. 24.—Authorizing C.P.R. to construct its railway across Birch St., Vancouver, B.C.

4500. Mar. 24.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to cross with its track the Sandwich, Windsor and Amherstburg St. Ry. at intersection of Aylmer Ave. and Wyandotte St., Windsor, Ont.

4501. Mar. 24.—Approving location of Canadian Northern Ry. through Darlington tp., mileage 198 to 207 west of Ottawa, Ont.

4502. Mar. 24.—Approving Temiscouata Ry. Co.'s by-law authorizing F. X. Belanger, General Freight Agent, to prepare and issue tariffs of tolls to be charged by company for all freight traffic carried by it.

4503. Mar. 24.—Authorizing Canadian Northern Ontario Ry. to erect its telegraph wires across the G.T.R at Washago, Ont.

4504. Mar. 24.—Approving change in location of Edmonton and Slave Lake Ry. Co. through tps. 54 and 55, range 25, west 4th mer., between mileage 7.5 and 20, reckoned from the junction of the Canadian Northern Ry. main line in Alberta.

4505. Feb. 27.—Authorizing Maine Central Rd. to use Monarch fire extinguisher in its cars in accordance with requirements of order 3238 of July 3, 1907.

4506, 4507. Mar. 24.—Authorizing Muskoka Independent Telephone Co. to erect its wires across the G.T.R. in Chaffey tp., Ont.

4508. Mar. 24.—Authorizing V. Flook to erect a telephone wire across the C.P.R. at Esterhazy, Sask.

4509. Mar. 24.—Authorizing J. L. Heatherington to erect an electric light wire over the G.T.R. in Newbury, Ont.

4510. Mar. 25.—Authorizing C.P.R. to build a spur line to G. F. Stephens' premises, Calgary, Alta.

4511. Mar. 24.—Authorizing G.T.R. to build certain tracks or sidings adjoining its main line (Chaudiere Jct. branch) in the vicinity of Somerset St., Ottawa, Ont., and the connection thereof with the C.P.R. tracks (St. Lawrence and Ottawa Ry.)

4512. Mar. 25.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to deviate a portion of its located line of railway through a part of the townships of Gosfield South, Mersea and Leamington, Ont.

4513. Mar. 25.—Authorizing C.P.R. to open for carriage of traffic the portion of its Pheasant Hills branch from Lanigan to Asquith, Sask.

4514. Mar. 25.—Authorizing the Arthabaska Water and Power Co. to place through conduits to carry a 2,300 volt power line under the G.T.R. near Victoriaville, Que.

4515. Feb. 29.—Extending until June 1, 1908, the time fixed authorizing the use of contracts, conditions, by-laws and regulations of the Canadian and Dominion Express Companies.

4516. Mar. 25.—Authorizing C.P.R. to construct its railway across the highways between lots 20 and 21, con. 9, mileage 15.58, and between con. 9 and 10, mileage 17.3, in Vaughan tp., Ont.

4517. Feb. 29.—Extending until June 1, 1908, time within which contracts, conditions, by-laws, regulations, declarations, and notices, should continue in use by the National and American Express Companies, and have effect.

4518. Feb. 29.—Extending until June 1, 1908, time within which Pacific Express Co.'s forms of contract may be used.

4519. Mar. 24.—Authorizing C.P.R. to construct its railway across 26 road allowances on its Pheasant Hills branch, mileage 332 to 358, from Saskatoon westerly.

4520. Feb. 29.—Extending until June 1, 1908, time within which the United States and Great Northern Express Companies may use their forms of contracts, conditions, by-laws, regulations, declarations, and notices.

4521. Mar. 25.—Extending until June 1, 1908, time within which Maritime Express Co. may continue to use its form of freight and money order receipt.

4522. Mar. 25.—Authorizing C.P.R. to construct a spur to the Ideal Fence Co.'s premises, Winnipeg, Man.

4523. Mar. 25.—Authorizing C.P.R. to construct a spur across Huron St., Toronto, rescinding order 4413, dated Mar. 6.

4524. Mar. 25.—Authorizing C.P.R. to construct its railway upon and across St. Patrick St., Montreal, in building a spur to T. Prefontaine & Co.'s premises.

4525. Mar. 25.—Authorizing Bell Telephone Co. to erect its wires over the Michigan Central Rd. near Melbourne station, Ont.

4526. Mar. 24.—Authorizing G.T. Pacific Ry. to construct its railway across 54 highways in Saskatchewan, from mileage 49.197 to 100.298.

4527. Mar. 26.—Authorizing C.P.R. to construct spur to the Western Canada Cement and Coal Co.'s premises, Kananaskis, Alta.

4528. Mar. 26.—Authorizing C.P.R. to construct a bridge on its Esquimalt and Nanaimo branch at mileage 35.6.

4529. Mar. 26.—Approving revised location of C.P.R. Crow's Nest branch, from mileage 94 to 110.

4530. Mar. 26.—Authorizing C.P.R. to construct spur to the Ellison Milling and Elevator Co.'s premises, Lethbridge, Alta.

4531, 4532. Mar. 26.—Approving location of G.T. Pacific Ry. stations at four points in Saskatchewan.

4533. Mar. 25.—Authorizing railways in Canada, subject to the jurisdiction of the Board, to issue to secretaries of railway branches of Y.M.C.A. located on their lines, of which its employes are members, and for their household effects, free transportation or reduced rates, when the secretaries are travelling in connection with their secretarial duties, or are being transferred by the Association.

4534. Mar. 26.—Authorizing Montreal and Southern Counties Ry. to construct its railway across Front St., St. Lambert, Que.

4535. Dec. 9, 1907.—Authorizing the G.T.R. to build a branch line at or near St. Lambert, Que., to connect its districts 1 and 2.

4536-4542. Mar. 31.—Authorizing Rochester tp., Ont., to erect telephone wires across the Michigan Central Rd. at various points.

4543. Mar. 27.—Authorizing C.P.R. to construct a spur to Monarch Lumber Co.'s premises, at Savonas, B.C.

4544. Mar. 27.—Authorizing G.T. Pacific Ry. to construct a spur from its Lake Superior branch, mileage 87.76, north-west of Fort William, Ont., for 1.94 miles.

4545. Mar. 31.—Authorizing Bell Telephone Co. to erect its wires across the G.T.R. siding to the St. Clair Foundry, Toronto Jct., and rescinding order 4182 dated Dec. 26, 1907.

4546. Mar. 27.—Approving plans of C.P.R. standard pile and timber trestles.

4547. Mar. 27.—Authorizing C.P.R. to construct spur to R. Carroll's premises, Caledon tp., Ont.

4548. Mar. 27.—Authorizing C.P.R. to construct spur to Bury Pulpwood and Lumber Co.'s premises, near Gould, Que.

4549. Mar. 27.—Authorizing Glengarry Telephone Co-operative Association to erect wires across G.T.R. at the public highway near Dalkeith station, Ont.

4550. Mar. 31.—Authorizing Bell Telephone Co. to erect wires across G.T.R. at public crossing near Forest station, Ont.

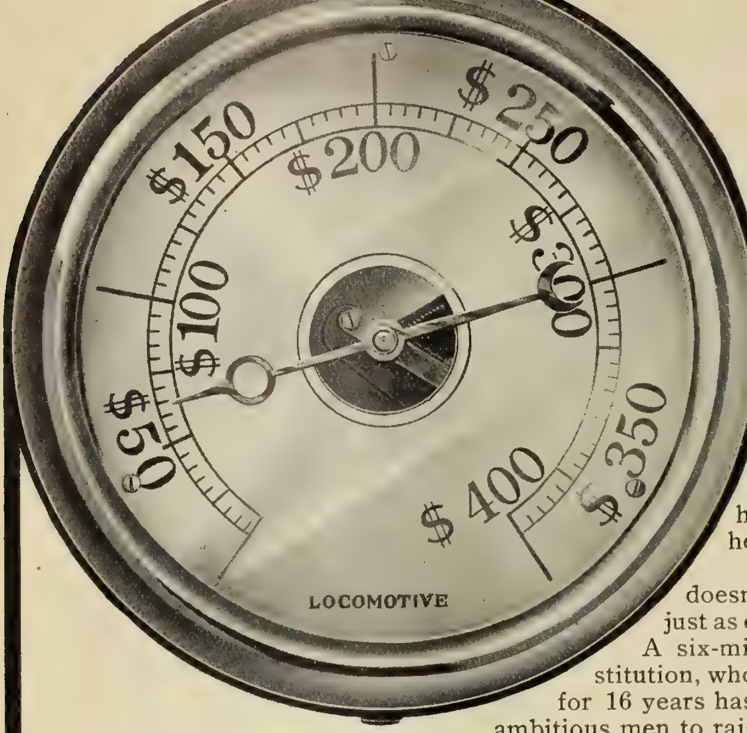
4551. Mar. 31.—Approving Temiscouata Ry. Co.'s by-law authorizing F. X. Belanger, General Freight Agent, to prepare and issue tariff of tolls to be charged for all freight traffic, and cancelling order 4502, Mar. 24.

4552. Apr. 1.—Authorizing Town of Thorold, Ont., to lay water pipes through the Niagara, St. Catharines and Toronto Ry. Co.'s lands, etc.

4553. Apr. 2.—Authorizing C.P.R. to construct a spur to the McLeod Milling Co.'s premises, Macleod, Alberta.

4554. Apr. 1.—Recommending to the Governor-in-Council for approval Canadian Northern Ontario Ry. Co.'s by-law respecting travelling upon and use of the railway.

4555. Apr. 1.—Recommending to the Governor-in-Council for approval Canadian Northern Quebec Ry. Co.'s by-law respecting travelling upon and use of the railway.



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Mechanical Draftsman
Machine Designer
Electrical Engineer
R. R. Const'n Eng.
Civil Engineer
Bridge Engineer
Chemist
Mining Engineer
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Ad Writer
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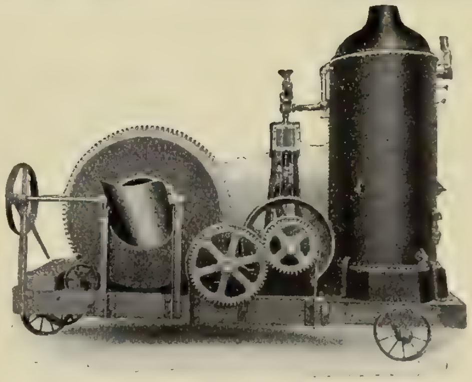


OPINIONS

Toronto, Oct. 18, 1907.
"Mixer is in every way satisfactory, and we can highly recommend same to intending purchasers."
A. GARDNER & CO., Contractors.

Hervey Jct., Oct. 15, 1907.
"Mixer has given entire satisfaction."
MacDONNELL & O'BRIEN.

EVERY USER SATISFIED

OPINIONS

Fredericton, Oct. 15, 1907.
"We have had every satisfaction and have not anything but praise to offer for your Mixer."
WILLARD KITCHEN CO., Ltd.

Montreal, Oct. 16, 1907.
"I consider the Ransome Mixer is not approached by any other make in general efficiency and in mechanical details."
E. A. WALLBERG.

EVERY USER DELIGHTED

Ransome Concrete Mixers

ALL CAPACITIES IN STOCK

HAVE MADE GOOD EVERYWHERE THEY HAVE BEEN INSTALLED

WITH OR WITHOUT POWER

Our Concrete Mixers are extremely simple—very easy to operate—efficient and durable

WE NOW CAN OFFER AN EFFICIENT HAND MIXER—6 CUBIC FEET CAPACITY—JUST THE MIXER FOR SMALL CONCRETE WORK—INEXPENSIVE AND EASY TO OPERATE—PARTICULARS UPON REQUEST

F. H. Hopkins & Co

CANADIAN REPRESENTATIVES
SUCCESSORS LATE JAS. COOPER

Montreal

4556. Mar. 28.—Directing G.T.R. to provide and keep at its own expense a watchman at Thames St., Ingersoll, Ont., daily between 6 a.m. and 11 p.m.

4557. Apr. 2.—Authorizing Rochester tp. to erect telephone wires across C.P.R. near Belle River station, Ont.

4558. Apr. 2.—Authorizing Crow's Nest Southern Ry. to operate its trains over the C.P.R. spur near Hosmer, B.C.

4559. Apr. 1.—Authorizing C.P.R. to make a special rate of $50 each for mining students of McGill University for a trip from Montreal to Vancouver, B.C., including side trips to Rossland and Greenwood; also rate of $40 each from Montreal to Rossland, Phœnix and Greenwood, B.C.

4560. Apr. 3.—Authorizing D. Albert to lay a water pipe under the Temiscouata Ry., in the parish of St. Francis, N.B.

4561. Apr. 6.—Authorizing Arthabaska Water and Power Co. to lay two underground conduits containing electric power cables, across the G.T.R. on cadastral lot 461, third range of Arthabaska, Que.

4562. Apr. 6.—Authorizing Bell Telephone Co. to carry its wires across the G.T.R. at Brewster Ave., Lachine, Que.

4563. Apr. 6.—Approving deviation of C.P.R.'s main line and double-track at Tunnel Island, mileage 0.29 to 1.24.

4564. Apr. 6.—Authorizing Commissioners of Transcontinental Ry. to take possession of, expropriate, use and occupy a portion of the C.P.R. right-of-way and lands at or near St. Basil, N.B., and to change location of its line.

4565. Apr. 1.—Authorizing D. J. McKay to establish a crossing over the C.P.R., with an additional track at Nanton St., Crossfield, Alta.

4566. Apr. 9.—Approving revised location of G.T.R. branch line in Welland, Ont.

4567. Apr. 8.—Authorizing Central Ontario Ry. to divert the public highway through lot 23, con. 3, Monteagle tp., Ont.

4568. Apr. 8.—Authorizing Central Ontario Ry. to construct its railway across the highway at station 403.40, Monteagle tp., Ont.

4569. Apr. 8.—Authorizing M. J. Costello to prepare and issue tariff of tolls to be charged upon the Vancouver, Westminster and Yukon Ry.

4570. Apr. 7.—Authorizing Commissioners of Transcontinental Ry. to take possession of, expropriate, use and occupy a portion of the New Brunswick Ry. right-of-way and lands about nine miles west of Grand Falls, N.B., also to deviate the N.B.R. Co.'s line.

4571. Apr. 7.—Approving location of British Yukon Ry. from Macrae on main line at station 1905-40.8, near mile post 103, towards the Tahkeena River, a distance of 12.5 miles.

4572. Mar. 31.—Authorizing the Town of Galt to put a storm drain and connections under G.T.R. track on George St., Galt, Ont.

4573. Apr. 7.—Approving standard freight mileage tariff C.R.C. 288 of Niagara, St. Catharines and Toronto Ry., to apply between stations on its new lines, omitting its main line between Port Dalhousie and Niagara Falls.

4574. Apr. 8.—Authorizing C.P.R. to build a spur line to E. and T. Fairbanks & Co.'s premises, Sherbrooke, P.Q.

4575. Apr. 9.—Approving standard drawings for frame and pile trestles of Canadian Northern Quebec Ry. upon its St. Jerome, Montford and Garneau-Quebec divisions.

4576. Apr. 9.—Authorizing C.P.R. to build an additional track across the public highway at Maxwell, N.B.

4577. Apr. 8.—Extending until June 15, 1908, time within which Canadian Northern Ontario Ry. shall install interlocking and derail plant at Elbow Creek crossing with the C.P.R.

4578. Dec. 26, 1907.—Authorizing Vancouver, Victoria and Eastern Ry. to take additional lands required by it for the diversion of the River Road, New Westminster district, Municipality of Delta, B.C.

4579. Mar. 10.—Authorizing the C.P.R. to take additional lands adjoining station for the accommodation of traffic, being a portion of lots 22, 23 and 36, according to registered plan no. 5a, Toronto.

4580. April 14.—Authorizing Brantford and Hamilton Electric Ry. to place its electric power, trolley and feeder wires over the G.T.R. Tillsonburg branch in Brantford, Ont.

4581. Mar. 12.—Authorizing Brantford and Hamilton Electric Ry. to cross with its track the G.T.R. Tillsonburg branch in Brantford, Ont.

4582. April 14.—Authorizing G.T.R. to reconstruct bridge over Waterdown Road, East Flamboro tp., Ont.

4583. Mar. 31.—Authorizing Vancouver, Victoria and Eastern Ry. and Nav. Co. to construct a flume over the Anglo-British Columbia Cannery Co.'s property, lot 23, group 2, New Westminster district, B.C.

4584. April 10. — Authorizing Ingersoll Telephone Co. to place its wires over C.P.R. at the right-of-way between 1st and broken front concession, Oxford tp., Ont.

4585-4591. April 10.—Approving of Quebec, Montreal and Southern Ry. stations at St. Philomene, Nicolet, Becancour, St. Charles, Orignaux, Gentilly, and Gentilly River, Que.

4592. April 10.—Authorizing C.P.R. to carry its spur in the town of Thessalon across certain roads in Thessalon, Ont.

4593. April 10.—Authorizing C.P.R. to reconstruct bridge 100.5, Sherbrooke section, Que.

4594. April 10.—Authorizing C.P.R. to reconstruct bridge 51.3, Prescott branch, Ont.

4595. April 10.—Authorizing C.P.R. to reconstruct bridge 46.74, White River section, Ont.

4596-4598. April 10.—Approving location of Quebec, Montreal and Southern Ry. stations at Pierreville, St. Gregoire and La Baie, Que.

4599. April 10.—Authorizing Le Credit Municipal Canadien to lay pipes under the Montreal, Park and Island Ry. at the Upper Lachine Road at St. Pierre aux Liens, and west of the Dominion Car and Foundry Co.'s works at St. Pierre aux Liens, Que.

4600. April 14.—Authorizing C.P.R. to construct a spur to J. B. Smith & Sons' premises, in Ferris tp., Ont.

4601. April 9.—Approving deviation in location of C.P.R. Co.'s Moose Jaw northwesterly branch, from sec. 23, tp. 28, range 5, west of 3rd M., to sec. 17, tp. 30, range 15, west of 3rd M., Saskatchewan.

4602. April 10.—Authorizing the Canadian Northern Ontario Ry. to construct a bridge over Stanley St., Hawkesbury, Ont.

4603. April 14.—Recommending to the Governor-in-Council for sanction, amalgamation agreement between Vancouver, Victoria and Eastern Ry. and Nav. Co. and Victoria Terminal Ry. Co.

4604. April 10.—Authorizing C.P.R. to build a spur from its Slocan branch, B.C., to W. C. E. Koch's premises.

4605-4607. April 14.—Extending until May 14 time within which Winnipeg Electric Ry. may be permitted to place its wires for transmission of electrical energy across the C.P.R. Lac du Bonnet branch C.P.R. tracks in St. Boniface, and C.P.R. tracks in sec. 25, tp. 12, range 8, east of 1st M., Manitoba.

4608-4610. April 14.—Authorizing Crow's Nest Pass Electric Light and Power Co. to carry its telephone wires across British Columbia S. Ry., at the crossing of the B.C.S. Ry. and the Morrissey, Fernie and Michel Ry. near Fernie, at Elko, and at Prior St., Fernie, B.C.

4611. April 9.—Approving revised location of G.T. Pacific Ry. from Yellowhead Pass to Tête Jaune Cache, mileage 0 to 50, Cariboo district, B.C.

4612. April 9.—Approving location of G.T. Pacific Ry. from Prince Rupert easterly, mileage 50 to 100, Copper River Coast district, B.C.

4613. April 15.—Authorizing G.T. Pacific Ry. to connect its Lake Superior branch with the C.P.R. at Dexter, Ont.

4614. April 9.—Approving deviation and location of double-tracking of C.P.R. main line between Kenora and Garwood, Ont., mileage 142.6 to 145.

4615. April 15.—Approving deviation in location of main line of C.P.R. Lauder extension branch, from mileage 20.04 to 32.28.

4616. April 15.—Authorizing the C.P.R. to open for traffic the diversion of the British Columbia Southern Ry. Co.'s main line, at mileage 85.4 east of Sparwood, B.C., from mileage 16.5, Cranbrook section, for 3,366 ft.

4617. April 15.—Authorizing Bell Telephone Co. to place aerial wires across C.P.R. at Metcalf St., North Bay, Ont.

4618. April 10.—Authorizing C.P. Ry Co. to build a spur to C. B. Hume & Co.'s premises, Revelstoke, B.C.

4619. April 9. — Authorizing Chatham, Wallaceburg and Lake Erie Ry. to operate its cars over the crossing of the G.T.R. on William St., Chatham, Ont., until Aug. 1, 1908.

4620. April 15. — Authorizing Chatham, Wallaceburg and Lake Erie Ry. to cross, by an undercrossing, the Michigan Central Ry. near Charing Cross station, Ont.

4621. April 15.—Authorizing C.P.R. to construct an extra track across road allowance at mileage 4.9 of its main line, Fort William section, Ont.

4622-4627. April 15. — Authorizing the C.P. Ry. to construct extra track across the road allowances at various points on its Fort William section, Ont.

4628. April 16.—Authorizing C.P.R. to build a spur to R. Watson & Co.'s premises, Toronto.

4629. Mar. 31.—Authorizing G.T. Pacific Ry. to build a siding leading from and adjacent to its main line, at West Fort William, Ont.

4630. April 16.—Authorizing C.P.R. to build its railway across certain highways in Albion tp., Ont.

4631. April 16.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to open for carriage of traffic the portion of its railway between Kingsville and Leamington, Ont., 8.7 miles.

4632. April 16.—Authorizing C.P.R. to construct its railway across certain highways in Albion and Vaughan tps., Ont.

4633. April 15.—Authorizing G.T.R. and C.P.R. to operate their trains over the crossing in Lennoxville, Que., without being brought to a stop.

4634. April 16.—Authorizing C.P.R. to construct its railway across a highway in Brant tp., Bruce County, Ont.

CORRECTION.

In our Mar. issue we published the following summary of order: "4350. Jan. 21—

HUDSON HIGH POWER STEEL

Best for Locomotive and General Shop Work

Unequalled for all kinds of cutting tools. The best steel makes the best tools, that is the reason that Hudson Tools will run faster and wear longer than any other high speed tools.

PROFITS GROUND AWAY

The time your men will save in grinding alone is the practical economy of Hudson High Power Steel. Complete line of Twist Drills, Milling Cutters, End Mills, Taper Bridge Reamers, Shell Reamers, carried in stock. All steel and tools guaranteed.

BALDWIN STEEL COMPANY

Makers of highest grades Crucible Steels

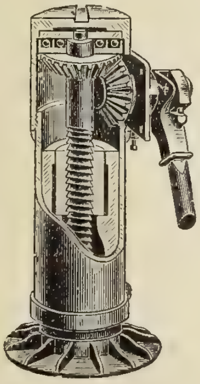
GENERAL OFFICE: 133 READE ST., New York City.

BOSTON PHILADELPHIA CHICAGO PITTSBURG

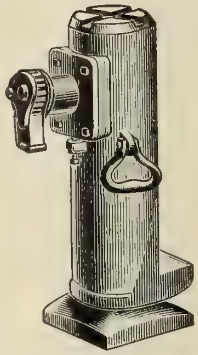
NORTON JACKS

ARE MADE IN CANADA AND SAVE YOU DELAY AND DUTY ON AMERICAN MADE JACKS.

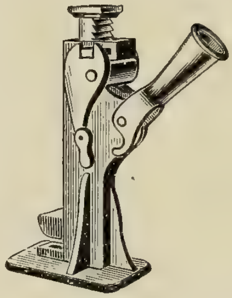
50 Styles 8 to 70 Tons Capacity
Carried in stock for IMMEDIATE DELIVERY



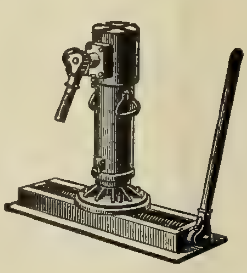
Sectional View



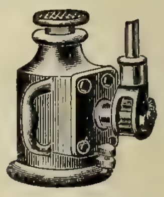
Foot Lift Jack



15 Ton Track Jack



Traversing Jack



Journal Jack

MANUFACTURED BY

A. O. NORTON, COATICOOK, QUE.

Stock Carried by MUSSENS LIMITED, MONTREAL

Approving C.P.R. spur line, known as the branch line north of Edmonton, Alta., through secs. 14, 15, 16, 17 and 18, township 53, north, range 24, west of 4th meridian, Alberta, commencing at the centre line of the G.T. Pacific Ry. main line, in the n.w. ¼ of sec. 14, township 53, north, range 24, west of 4th meridian." In the first line "C.P.R." should have read "G.T. Pacific Ry."

Gt. Northern Ry. Lines in Canada, Etc.

Terminals in Winnipeg.—Jas. Fisher, K.C., counsel in Winnipeg for the Great Northern Ry., was interviewed, April 3, as to the intention of the company with respect to the construction of terminals in Winnipeg. He said he had not been advised from St. Paul, Minn., as to what it was proposed to do, but he could not say that plans had not been prepared, or that the work would not be gone on with this spring. The station would likely be located one block west of Princess St., on Ross Avenue, and the repair shops for locomotives and cars would be located on a tract of land which had been acquired just west of the C.P.R. shops.

Midland Ry. of Manitoba.—No new work is reported to be projected upon the various lines authorized to be constructed during the current year. The lines already constructed extend from Portage la Prairie, Man., 77.01 miles, to the International boundary, where connection is made with the Great Northern Ry. branch from Grand Forks, N.D.; and from Morden, Man., 15.34 miles, to the International boundary, where connection is made with a branch from the G.N. Ry. Grand Forks branch extending from Grafton to the International boundary north of Walhalla, N.D

Brandon, Saskatchewan and Hudson Bay Ry.—No new work is projected upon this line for the current year. The present line extends from Brandon, Man., to the International boundary, near St. John, N.D., 69.45 miles, connection being made with a branch of the Great Northern Ry. from Church Ferry, N.D.

Crow's Nest Southern Ry.—The extension of this line from Fernie to Michel, B.C., 21.77 miles, is reported to have been completed, and it was expected that a regular train service would be put in operation by April 30. It is reported that surveys have been made for a further extension of the line along the Elk valley, and that the ultimate intention is to extend it over the mountains to Calgary, Alta. The line now runs from Michel to the International boundary at Gateway, B.C., about 73 miles, at which point it connects with a branch of the Great Northern Ry. from Rexford, Wash.

Vancouver and Tacoma Entrances.—A Tacoma, Wash., dispatch of April 17 says that Chairman J. J. Hill, of the Great Northern, has arranged for its entrance into Tacoma, over the Northern Pacific tracks from Seattle, and that in return the Northern Pacific will get an entrance into Vancouver, B.C., over the Great Northern lines.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—The recent amalgamations have added to the constructed mileage of this railway the 14.81 miles of line constructed between Vancouver and New Westminster, B.C., by the Vancouver, Westminster and Yukon Ry., and the 18.38 miles of line between Cloverdale and Port Guichon, constructed by the Victoria Terminal Ry. and Ferry Co. These lines are connected up with the New Westminster Southern Ry., which joins the Great Northern Ry. line along the Washington mainland from Blaine, at the International boundary line, to Seattle, by means of the Fraser River bridge, constructed by the British Columbia Government, and over which the G.N.R. trains run on payment of tolls. The construction of several pieces of line between the Fraser River and the International boundary are being proceeded with under the charters of these several companies, and the right to complete them has been secured to the V. V. and E. Ry. and N. Co., by the agreements of amalgamation. We are advised as to these lines as follows: That the approximate length of the line under construction by the terms of the V.T. Ry. and Ferry Company's charter, from the International boundary to Olivers, B.C., is 11.32 miles, upon which track has already been laid for about a mile. Construction on the remainder of the line is in progress. The approximate length of the line being constructed from Brownsville to Olivers, B.C., under the V.V. and E. Ry. and N. Co.'s charter, is 9.80 miles, and track has been laid for five miles, construction being in progress upon the remaining 4.80 miles. The approximate length of the line being constructed from Cloverdale to Sumas, at the International boundary, under the V.V. and E. Ry. and N. Co.'s charter is 26.25 miles; track has been laid upon 1.40 miles and construction is being proceeded with upon the rest of the line. At Sumas Junction, B.C. (Sumas, Wash.), there is a junction of the Bellingham Bay and British Columbia Ry., the Northern Pacific Ry., and the C.P.R. branch from Mission.

Construction is also being proceeded with on the line westerly, the work on the United States side of the line being done by the Washington and Great Northern Ry. Track has been laid to Keremeos, B.C., 18.20 miles, from the last crossing of the International boundary, and work has been in progress on the grading between Keremeos and Hedley, B.C. This is now reported to be about completed, and a beginning is said to have been made on the clearing of the route between Hedley and Princeton. The surveys from Princeton to Sumas have been made, but some parts of the route have not been finally approved.

Great Northern Ry. Branch Lines.—The company has under construction, survey, or consideration, a number of branch lines in the U.S., the following of which are of importance as affording connection with lines in Canada:

Dewey Lake to International Falls, Minn.—This extension, which is reported to be partially graded, will be about 78 miles long. International Falls is on the Rainy River, in the vicinity of Fort Frances, Ont., on the Canadian Northern Ry. Dewey Lake is the terminus of a branch of the G.N.R. from Hibbing, which is a station on the branch from the main line at Swan River, a station 34 miles easterly from Deer River. In Jan., press reports stated (Feb., pg. 97) that a line was projected from Deer River to International Falls, and the route of such a line would be approximately the same as the extension which the G.N.R. has partially graded between Dewey and the International Falls.

Greenbush to Warroad, Minn.—The length of this extension is 44 miles and the grading is reported to be practically completed. Warroad is a station on the Canadian Northern Ry., 323.8 miles from Port Arthur, Ont., and 114 miles from Winnipeg.

Wenatchee to Oroville, Wash.—A line between Wenatchee, near where the line crosses the Columbia River, northerly to Oroville, a station on the Washington Great Northern—Vancouver, Victoria and Eastern Ry., and Navigation Co.'s line, is reported to be partially graded. The line has a length of 140 miles, and follows the Okinakane River valley from near Alma. (April, pg. 243.)

M. A. Piggott & Co., contractors, Hamilton, have entered an action against the Guelph and Goderich Ry. Co., to recover $523,574.75 for work done and material supplied on the construction of the section of the line for which the firm had a contract.

Recent Dominion Legislation.

In addition to the acts affecting transportation interests passed at the current session of the Dominion Parliament, the following have received the Royal assent:

Atlantic, Quebec and Western Ry.—Extending the time for construction, etc.

Canadian Northern Quebec Ry.—Extending time for construction, etc.

Canadian Northern Ry.—Extending time for construction of various branch lines, and authorizing construction of additional lines.

Dominion Atlantic Ry.—Authorizing various changes in connection with the directorate, date of annual meeting, etc., and authorizing construction of a branch line.

Erie, London and Tillsonburg Ry.—Extending time for construction.

Government Railways.—Amending act respecting the Government railways.

Intercolonial and P. E. I. Railways.—Amending act respecting Employes' Provident Fund Act.

Interprovincial Ry. Bridge Co. of New Brunswick.—Extending time for construction.

Montreal, Ottawa and Georgian Bay Canal Co.—Extending time for construction.

Ocean Steamship Subsidies.—Amending the act in relation thereto.

Owen Sound and Meaford Ry.—Granting an extension of time for construction.

Trans-Canada Ry.—Extending time for construction.

Windsor, Chatham and London Ry.—Extending time for construction.

Recent Ontario Legislation.

The following acts affecting transportation interests were passed at the recent session of the Ontario Legislature:

Canada Central Ry.—Extending the time fixed for construction.

Dunnville, Wellandport and Beamsville Electric Ry.—Extending the time for construction.

Fort Erie Ferry Ry.—Extending the time for construction.

Fort William.—Affecting electric railways and railway construction within the city.

Guelph Radial Ry.—Authorizing an extension of time for construction.

Hamilton and Guelph Junction Ry.—Extension of time for construction.

Iron Range Ry.—Act of incorporation.

Lac Seul, Rat Portage and Keewatin Ry.—Extending the time for construction.

Lake Superior, Long Lake and Albany River Ry.—Authorizing extension of the time for construction.

Morrisburg Electric Ry.—Act of incorporation.

Mount Mackay and Kakabeka Falls Ry.—Extending time for construction.

Niagara Falls Suspension Bridge.—Act respecting the city of Niagara Falls and the assessment of the Niagara Falls Suspension Bridge.

North Lanark Ry.—Granting an extension of time for construction.

North Midland Ry.—Granting an extension of time for construction.

Ontario.—Amending the Railway Act, 1906, (two acts), and an act to supplement the revenues of the Crown.

Ontario Sault Ste. Marie Ry.—Amending the powers of the company.

Ontario West Shore Electric Ry.—Granting an extension of time for construction.

Railway and Municipal Board.—Amending the powers of the Board.

South-Western Traction Co.—Amending the powers of the company.

Western Central Ry.—Granting an extension of time for construction.

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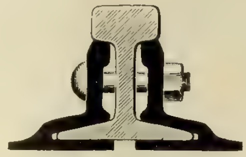

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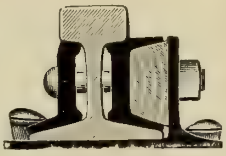

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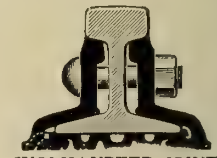

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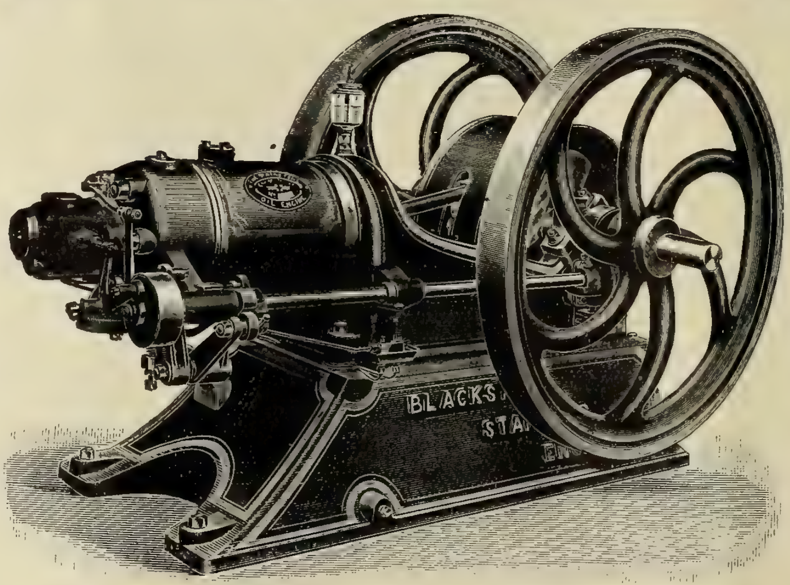

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Alberta Southwestern Ry.—Application is being made at the current session of the Dominion Parliament for an act incorporating a company with this title, for the purpose of constructing a railway from the International boundary in British Columbia, near where the Kootenay River crosses, thence northerly along the valley of the river to or near Elks, thence northeasterly, following the valleys of the North Kootenay River and the south fork of the Old Man River, to Cowley, Alta.; thence northerly following the valley af the Old Man River through the gap in the Livingstone range, and along the northwest branch of the Livingstone River, and along the Highwood River, easterly and northeasterly to near Calgary. Chrysler, Bethune and Larmouth, Ottawa, are solicitors for the applicants.

Atlantic, Quebec and Western Ry.—The Dominion Government has entered into a contract under the act granting aid to certain railways, with the A., Q. and W. Ry., for the construction of a railway from Paspebiac to Gaspe, Que., as near the shore as practicable, a distance of about 102 miles. (April, pg. 243.)

Bangor and Aroostook Rd.—A. E. Trites, Salisbury, N.B., who has constructed most of the extensions on this railway along the New Brunswick border during the past ten years, states that no further construction will be done by the company this year. (Jan., pg. 19.)

Bow River Collieries.—A U.S. report says that the company owning 5,300 acres of coal areas, and 960 acres of surface rights in the Bow River district of Alberta, has acquired a charter authorizing the construction of a line, about 18 miles long, from the collieries to the C.P.R. R. F. Reeve, Lethbridge, Alta., is reported to be interested.

Bracebridge and Trading Lake Ry.—A writ has been issued by G. A. Begy, St. Catharines, Ont., against A. M. Orpen, Toronto, for failing to complete a contract for construction upon this line between Bracebridge and Baysville, Ont. Damages are laid at $13,000, and there is also a claim for $750 cash alleged to have been paid. (Jan., pg. 19.)

Canada Central Ry.—The Ontario Legislature passed an act at its current session granting an extension of time within which the projected line may be constructed.

The Canada Central Ry. was incorporated in 1902, by the Ontario Legislature and by the Dominion Parliament, the Ontario act giving power to construct a railway from near the mouth of the French River, northwesterly to Wahnapitae Lake; thence northerly to the headquarters of the Montreal River, and thence to a point on the Albany River, and a branch line to Port Arthur and Fort William; while the Dominion act gives power to construct a similar line, and to extend it from the Ontario boundary at the Albany River, through Keewatin and Manitoba, to Lake Winnipeg, thence 70 miles north of Prince Albert, Sask., and Edmonton, Alta., to Tête Jaune Cache, B.C., thence southerly via Kamloops to Princeton, and thence to New Westminster and Vancouver, B.C. The provisional directors of the Ontario company were: T. W. Patterson, Vancouver, B.C.; T. H. Johnson, Winnipeg, Man.; E. F. B. Johnson, Toronto; J. Milne, Duluth, Minn.; and M. B. Lloyd, Minneapolis, Minn.; while those of the Dominion company were: T. W. Patterson, Vancouver; E. F. B. Johnson, Toronto; B. W. Folger, Kingston, Ont.; J. Millen, Duluth, Minn.; and P. Weidner, Detroit, Mich. Additional powers were obtained from the Dominion Parliament in 1903, authorizing lines to Fort Churchill on Hudson Bay; Waddington Harbor on Bute Inlet; via the Peace River to the Portland Canal on the Pacific Ocean; from Sudbury to Toronto, and from the Montreal River to the Ontario-Quebec boundary; and both the Dominion Parliament and the Ontario Legislature have granted extensions of time for construction. In 1905, the Legislature authorized a change in the provisional directorate, the names of F. H. Clergue, W. Morris, G. E. Drummond, W. H. Plummer, J. MacArthur and W. A. Firstbrook being added. (Mar., pg. 179; Dec., 1906, pg. 711; June, 1905, pg. 241; April, 1905, pg. 143, and Oct., 1903, pg. 341.)

Eastern British Columbia Ry.—Reports from Fernie, B.C., state that it was expected that construction operations would be started early in April upon the construction of this line. The route located is from Macgilvery station on the Cranbrook section of the C.P.R. Crow's Nest Pass Line, 6.2 miles from Crow's Nest, at the head of the big loop where the Michel Creek is crossed, and will extend up the valley of the creek to the head, where it will cross the divide between the waters of that stream and the head waters of the Flathead River, which flows south through a coal and oil region to Flathead Lake, Montana. Some 15 miles of line are expected to be completed this season, to the property of the Corbin Coal Co., which is in process of development. W. R. Wiley is Chief Engineer in charge of surveys, etc. (April, pg. 243.)

Canadian-Minnesota Bridge Co.—It was reported April 2, that trains were being operated over this bridge across the Rainy River, near Fort Frances, Ont., connecting the Duluth, Rainy Lake and Winnipeg Ry., and the Canadian Northern Ry. (April, pg. 243.)

The Colchester Coal and Ry. Co.'s line from Debert Station, on the Intercolonial Ry., to its coal mine, four miles, is reported by the Provincial Engineer of Nova Scotia to have a fair surfacing of gravel ballast, and to be fenced throughout except on the company's own lands. A telephone line has been constructed and connects with the I.C.R. station. The company owns one locomotive, which is sufficient to handle the present traffic. An iron mine is being developed in the vicinity of the coal mine which will add to the traffic. The Government has paid a subsidy of $12,000 on account of the construction of the line. (See Debert Ry., Nov., 1907, pg. 829; Colchester Coal and Ry. Co., Aug., pg. 561.)

Crow's Nest Northern Ry.—A. E. Wayland, Spokane, Wash., one of the provisional directors, says it is the intention of the company to start construction at once upon about 50 miles of the projected line northerly from the C.P.R. Crow's Nest Pass line, and a branch line of 10 miles. The branch line and 12 miles of the main line are reported to have been surveyed. The line will have a gradient of 1% or less, and the line will be laid with 70-lb. steel. It is expected that grading will be started in May, as U.S. press reports say contracts have been let. The line is to be constructed in the interests of the Crown Coal and Coke Co., and of the Michel Coal Mines, R. J. Belden, of Spokane, Wash., one of the provisional directors, representing the former company. (April, pg. 243.)

Detroit River Tunnel.—Fair progress is reported as being made with the work, and it is expected that in a short time a regular rate of progress of 10 ft. of tunnel per day will be made. Two air locks have been established, and a pressure of about seven pounds is being maintained, which will be gradually increased as the work progresses. The clay encountered shows a tendency to run below a depth of about 25 ft. from the surface, which interferes somewhat with the progress of the work. A considerable amount of work has been done on the approach tunnel on the Detroit side of the river, and the work of putting in the concrete at the two sections of the tube laid last fall is in progress. The tubes for two more sections are ready and they will be sunk into the berths prepared for them shortly. It is expected that all the tube sections will be in place by the end of the current season. (April, pg. 243.)

Duluth and Northern Minnesota Ry.—Press reports state that construction is to be re-started at once upon the line from Schauff Lake to Gun Flint Lake, Minn., about 80 miles. The line has been surveyed, and partially graded. At Gun Flint Lake, a junction would be effected with the Canadian Northern Ry., Gunflint branch, which has a length of 66.9 miles from the junction with the main line between Port Arthur and Winnipeg, at Stanley Junction, 19.1 miles from Port Arthur. The D. and N.M.R. extends from Knife River, where it has a connection with the Duluth and Iron Range Rd., to Schauff Lake, 45 miles. Jno. Millen, Duluth, is Vice-President and General Manager, and A. Mitchell, Duluth, is Chief Engineer. (See also Duluth, Thunder Bay Ry., July, 1907, pg. 479.)

Essex Terminal Ry.—We are advised that no construction work has been done on this projected railway since Dec, 1906, and it is not expected that anything further will be done until the right to construct it across the Windsor, Essex and Lake Shore Rapid Ry., on the town line north of the C.P.R., at Walkerville, Ont., has been obtained. The Railway Commission has recently given permission for the railway to construct its tracks across the Lake Erie and Detroit River tracks at Walkerville. (Sept., 1906, pg. 527.)

Fort William Terminal Ry.—Considerable opposition was offered before the Railway Committee of the House of Commons, to the passing of the bill for an extension of time. An agreement was subsequently reached under which the company is to expend 15% of the capital cost of the undertaking within a specified time, upon the bridge work and not upon the railway connections, and the city of Fort William may acquire the rights for foot and vehicular traffic at any future time on payment of a lump sum to be fixed by agreement, or by the Board of Railway Commissioners. Upon the question of location it was agreed that the company may, with the consent of the city and the approval of the Railway Commission, move the railway closer to the water front than is provided for by the present plans. (April, pg. 243.)

Great American Ry.—Articles of incorporation have been filed at Pierre, S.D., for a company with this title and with a capital of $150,000,000, with the object of constructing a railway from Chicago, Ill., to Winnipeg, Man., and Medicine Hat, Sask., with branches throughout the Northwest. The only indication of the route, other than the terminal points named, is that the proposed line is to cross Roberts county, in the extreme northwest corner of South Dakota. General powers are given in the charter for the construction of railways in the U.S. and Canada. The projected line would have a length of approximately 2,200 miles, and is estimated to cost $82,000,000. The incorporators are all Wisconsin men, and include A. J. Hyde, Lancaster, Wis., and I. W. Goodner, an incorporation lawyer of Pierre, S.D., the latter name being inserted to comply with the incorporation laws of the State. Branch offices of the company may be maintained at Lancaster, Wis., and Chicago, Ill.

Halifax and North-Eastern Ry.—In his annual report to the Nova Scotia Government, the Provincial Engineer refers to the survey made in 1906, jointly by the Government and the company. The estimates prepared by the company were submitted to the Government, which considered them too high, and a contract for construction could not be

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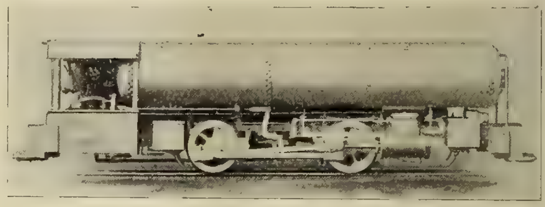

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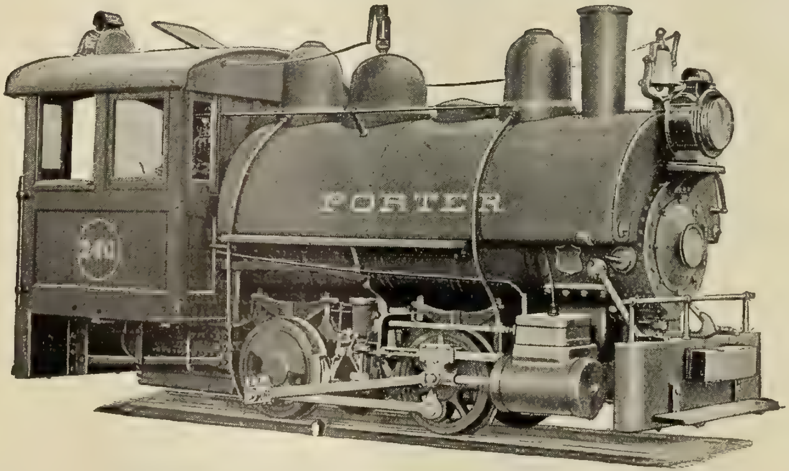

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arranged. It was therefore decided by the Government that it would be advisable to make further investigation with the idea of securing a location which would enable the line to be constructed for a lower estimate than that obtained by the company's survey. The surveys made in 1906 enabled the Department to decide on the best general route for most of the line, and three parties were placed in the field to accurately locate the cheapest line that would be suitable for the traffic of the district. As a result, with the exception of a few miles, a suitable location has been secured over the whole line. A few places remain where the line can be revised so as to cheapen it considerably, but generally a good location has been secured for a line with moderate gradients and curvature, equal to the standard of the subsidized lines of the province, which can be constructed at a reasonable cost. The plans, profiles and estimates have not been completed, but the work is being pushed forward as rapidly as possible. As soon as these are completed the Government will be in a position to make an advantageous contract with any company desiring to undertake the work. (April, pg. 243.)

Halifax and Southwestern Ry.—In the annual report of the Provincial Engineer of Nova Scotia, for 1907, it is stated that the year has been a very busy one on the line, an additional amount of ballast having been placed over the whole roadbed, a considerable amount of fencing done, and the Mersey River bridge completed. Some more ballast, and some other work, however, will be required before it can be said that the line is fully completed. The bridge which has been completed over the Mersey River is one of the largest and most expensive in the province. The principal difficulty in the way of its construction was in securing foundations. The river has a depth of 20 ft. at low water, and 18 ft. of material below this had to be excavated before a solid foundation could be reached. The piers and abutments are of concrete and the superstructure is of steel. On the Caledonia branch and the Victoria Beach line, some of the banks will have to be widened before the additional ballast, which is also required, can be put on. On the Middleton section, the old Central Ry., while a good deal has been done by the H. and S.W.R. in the way of renewing ties and other work, a large amount of work will be required to be done during the current year in the way of renewing ties, constructing fences, etc., so as to put it in equally good shape with the line from Halifax to Yarmouth. (Feb., pg. 97.)

Intercolonial Ry.—The Dominion Parliament, at its current session, passed votes on account of betterments, construction, etc., on the Intercolonial Ry., as follows:

Original construction	$ 125.00
To strengthen bridges	23,750.00
To increase water supply	3,275.00
To provide new turntables	2,062.50
Increased accommodation and facilities along the line	21,125.00
Towards double-tracking part of line	25,000.00
Locomotive and car shops with equipment	71,250.00
New machinery for locomotive and car shops	19,375.00
Improving telegraph line	112.00
Increased accommodation at Halifax, N.S.	62,500.00
Increased accommodation at Halifax, N.S.	220,000.00
Improvements at Windsor, N.S.	312.50
Extension to Sydney Mines, N.S	2,437.50
Improvements at North Sydney, N.S.	500.00
Increased accommodation at Sydney, N.S.	1,750.00
Improvements at Mulgrave, N.S	5,850.00
Water service at Pirate Harbor, N.S.	625.00
Increased accommodation at Antigonish, N.S.	562.50
Increased accommodation at New Glasgow, N.S.	1,250.00
Increased accommodation at Stellarton, N.S.	812.50
Increased accommodation at Pictou, N.S.	1,075.00
Increased accommodation at Pictou, N.S.	12,000.00
Increased accommodation at Truro, N.S.	13,125.00
Increased accommodation at Springhill Jct., N.S	362 50
Increased accommodation at Springhill Jct., N.S	2,500.00
Improvements at Amherst, N.S.	5,875.00
To put line between Indiantown and Blackville, N. B., into condition for operation.	10,000.00
Increased accommodation at St. John N.B	$ 15,000.00
Improvements at Sackville, N.B	3,375.00
Improvements at Loggieville, N.B	1,868.75
Improvements at Newcastle, N.B.	4,750.00
Improvements at Campbellton, N.B	3,125.00
Extension of wharf at Dalhousie, N.B.	375.00
Increased accommodation at St. Flavie, Que	2,562.50
Increased accommodation at Levis, Que.	375.00
Siding at Princess Pier, Levis, Que.	500.00
Engine house and machine shop, Riviere du Loup, Que.	14,437.50
Engine house, etc., Chaudiere Jct., Que.	6,925.00
Improvements Drummondville, Que.	750.00
Improvements Ste. Rosalie, Que.	10,737.50
Improvements Ste. Rosalie, Que.	20,000.00
Improvements St. Alexis, Que.	865.00

The question of the cost of the terminals at Halifax, N.S., was raised in the House of Commons, Mar. 24, upon a vote of $220,000 to increase accommodation there. The Minister of Railways explained that the improvements were under contract; in 1907 Parliament voted $300,000 for the work, but better progress was made than had been anticipated, so that $220,000 was due to the various contractors. The total amount expended upon the terminals was $3,753,188.01; the total estimated cost of the works required to complete the terminals was $1,019,380, of which $520,000 had already been expended, leaving about $500,000 yet to be expended. The works included in this estimate were:

Additional facilities west side Water St.	$ 173,225
36-stall engine house	175,000
Freight car repair shop	75,000
Store house, sand and oil house	35,000
Steel concrete chimney and foundation	4,500
14 coal pockets and foundation	2,500
100,000-gallon tank	5,000
Water supply	7,000
Cinder pits	10,000
Grading in new yard	51,000
Ballast	15,000
Tracks	20,000
Rails in engine house	3,655
Double-tracking, Richmond	55,000
Heating and piping in new building	2,000
Sewer in new yard	10,000
Turnouts	2,000
Tracks, Richmond yard	25,000
Locomotive crane	8,500
Building for power inspectors	2,000
Wharf and dredging	328,000
Total	$1,010.380

A contract is reported to have been let to the Canadian General Electric Co., Toronto, for the electric power plant for the yards at Stellarton, N.S.

The work of constructing a second track between Moncton and Painsec Jct., N.B., has been restarted for the season, R. McManus, of Memramcook, being in charge.

The engineering department is having a new measurement of the entire line made. (April, pg. 245.)

Iron Range Ry. and Development Co.—J. T. Horne, W. H. Hamilton, G. A. Graham, Fort William, Ont.; J. J. Drew, Guelph, Ont.; W. A. Dowler, Tillsonburg, Ont., were granted an act of incorporation at the recent session of the Ontario Legislature, with this title, with power to construct a railway, to be operated by steam or electricity, from the Lake of the Woods to Thunder Bay, in or near Fort William, and across the Lake of the Woods westerly to the Manitoba boundary, together with branch lines, particularly to the C.P.R., and to the International boundary line between Ontario and the State of Minnesota. The company sought extensive powers in the way of carrying on mining and other operations, but these were considerably curtailed by the Committee of the Legislature. The capital of the company is fixed at $1,000,000, its offices are to be at Fort William, Ont.; it may construct telegraph and telephone lines, carry on a general navigation business on navigable waters reached by its lines, and enter into agreements with the C.P.R., the Canadian Northern Ry., or the G.T. Pacific Ry., or other railway or transportation company. (Mar., pg. 181.)

Kettle Valley Lines.—Replying to a question in the Senate recently, the Secretary of State said the Government had no information later than June, 1907, with respect to the track laid on the line being constructed from Grand Forks, B.C., up the north fork of the Kettle River. Up to that date 12 miles of track was laid between Grand Forks and the second crossing of the Kettle River. An inspecting engineer of the Department of Railways inspected the part of the line in question, June 9, 1907, and made the report.

It is reported that construction will be restarted at an early date on the Spokane and British Columbia Ry., which is the extension of the K.V Lines, from Republic, Wash., to Spokane. Another report says that G. W. Fairweather, G. F. and P. A , recently stated, at Spokane, that the contract for the construction of the line from that city to Hellgate, Wash., about 65 miles, would be awarded early in July. The construction of the rest of the line between Hellgate and Republic, Wash., about 100 miles, is being held up, pending the decision of the Supreme Court in regard to the right-of-way across the Colville Indian Reserve. A number of years ago the Federal Government granted a right-of-way to a company, said to be backed by the Great Northern Ry., on condition that it be used within two years. The S. and B.C. Ry., later on, obtained a right to construct a line through the reserve, and litigation ensued. The courts of first instance decided in favor of the S. and B.C. Ry., and the appeal is now pending to the Supreme Court. (Feb., pg. 97.) See C.P.R. Construction, Betterments, etc.

Lac Seul, Rat Portage and Keewatin Ry.—An act granting an extension of time for the construction of this projected railway was passed at the recent session of the Ontario Legislature. (April, pg. 181; June, 1904, pg. 187; Feb., 1903, pg. 41.)

Lake Superior, Long Lake and Albany River Ry.—An act was passed at the recent session of the Ontario Legislature, granting an extension of time for three years for the commencement and of five years for the completion of this projected railway. The name of S. T. Clarke has been removed from the list of provisional directors; the capital of the company is increased to $3,000,000, and it is authorized to issue bonds to the extent of $30,000 a mile of line constructed. The amount of capital previously authorized was $1,000 000, and the bonding powers had been limited to $20,000 a mile. The location plans for the first ten miles from the shore of Lake Superior at Peninsula Harbor, Ont, have been completed and approved, and some small amount of grading done for the purpose of holding the charter. (July, 1905, pg. 285.)

Little Nation Ry.—W. Parisien, Cheneville, Que., has been appointed Secretary-Treasurer, succeeding J. A. Gadoury. The other officers and directors are as previously stated. (April, pg. 245.)

The Liverpool and Milton Ry. was constructed in 1899-1900 by a local company, without receiving any subsidy. It extends from Liverpool to Milton and the Rapids Falls and Cowie's Falls Pulp Mill, following the highway a total distance of 5.50 miles. The Provincial Engineer of Nova Scotia in his report for 1907 says that while built to standard gauge the gradients were so steep and the curvature so sharp it was almost impossible to use an ordinary locomotive and car on it. On the completion of the Halifax and Southwestern Ry., which crossed the line about a mile from Liverpool, it was thought advisable to connect the two railways. To make this connection effective it was necessary to reconstruct the old line, removing it from the highway so as to get suitable gradients and curvature. A subsidy was provided in Sept., 1906, to assist in the reconstruction, and the Legislature authorized the amalgamation of the line with the H. and S.W. Ry. The contract for the reconstruction of the line was let to the

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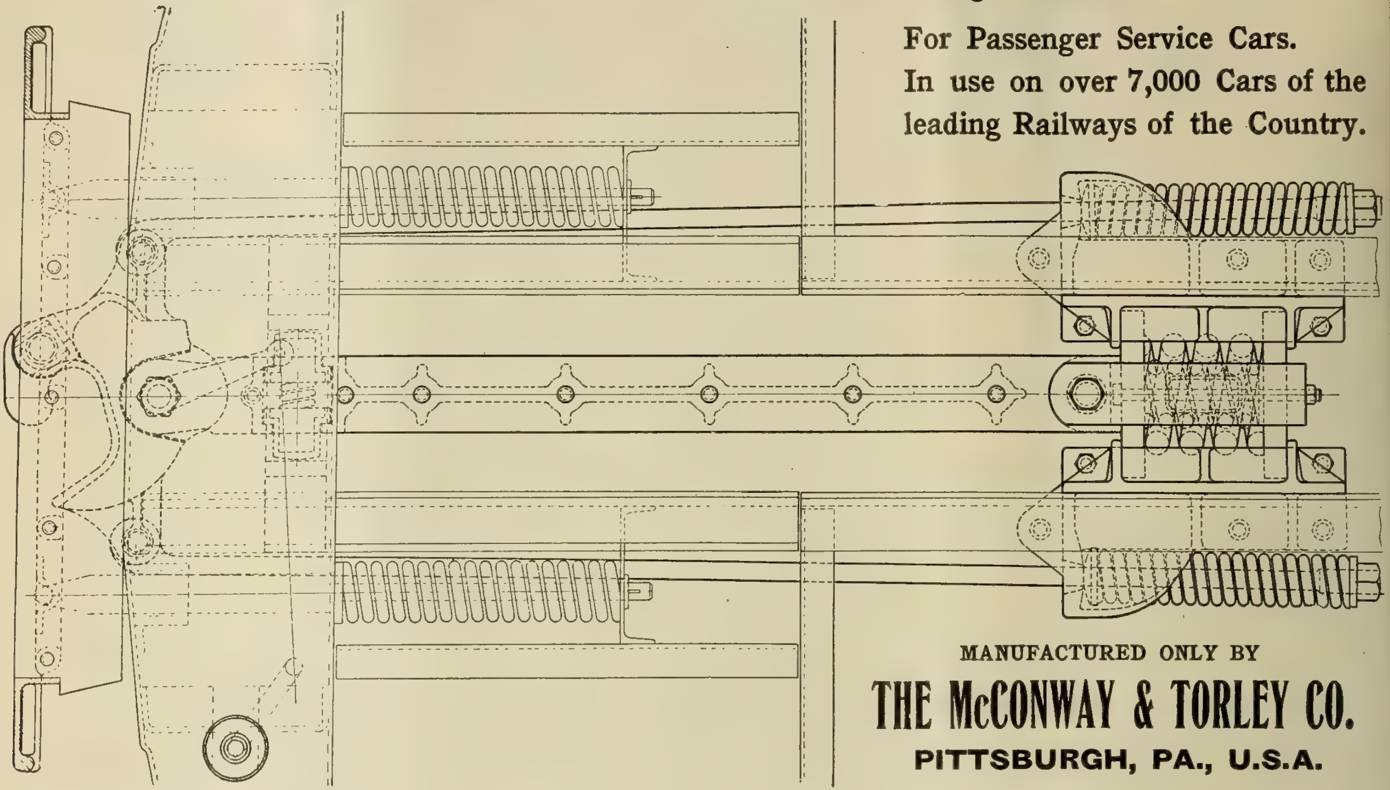

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Lindsay Construction Co., and the work was vigorously pushed during the season. A good deal of the work has been completed, the track has been relaid, and all that is now required to bring the line up to the standard of other railways in the province is the provision of additional ballast. (Jan., 1907, pg. 3.)

Magdalen River Valley Ry.—The Quebec Legislature is being asked at its current session to authorize a change in the location of this projected railway. The route which it is now proposed that the line shall follow is from the lot on which the Catholic Church in the seigniory of Magdalen River, Gaspe County, is situated, through certain specified lots, and the wild land owned by Frank Ross, thence southerly, and not approaching nearer than one-eighth of a mile to the Magdalen River, to the Little Falls, and thence east of the river to a junction with the proposed inland section of the Atlantic, Quebec and Western Ry. Until the A.Q. and W. Ry. constructs its inland section the M.R.V. Ry. may construct and operate a railway of less than standard gauge. Construction is to be commenced by 1910, and completed by 1913. (April, pg. 245.)

Minudie Coal and Ry. Co.—The Provincial Engineer of Nova Scotia in reporting to the Government upon this line says it is ballasted with culm coal and broken stone, is in good alignment with a very fair surfacing. A few portions of the line still require more ballast, but sufficient had been provided for distribution and spreading. The trestle bridging is good, the fencing and telephone lines are completed and a third-class station house has been erected at the head of the Government wharf at Minudie. During 1907, the company carried 2,400 tons of coal over the line, the only traffic up to the present time. The mine is producing about 200 tons of coal a day. It is intended to improve the shipping facilities at Minudie at an early date, and to provide the necessary rolling stock so that the line can be operated. The total length of the line is 6½ miles, and the Government has paid $16,000 on account of the subsidy, the remaining $4,800 being held until the ballasting is completed, and the rolling stock supplied. (May, 1907, pg. 325.)

Montreal Bridge and Terminal Co.—Application is being made at the current session of the Dominion Parliament for an act extending the time within which construction may be commenced and completed; and ratifying and confirming agreements made with certain railway companies, and for other purposes. Barnard and Dessaulles, Montreal, are solicitors for the applicants.

The charter, which had been held by the trustees of the estate of the late R. Prefontaine, Minister of Marine, has been purchased by a British syndicate, at the head of which is Lord Templetown, an Irish peer, who is President of the Atlantic, Quebec and Western Ry., under construction in Quebec; and also a director of the Farmers' Bank which has its head office in Toronto. It is stated that the company has engaged Sir Douglas Fox, London, Eng., as Consulting Engineer, and that the proposal to erect a bridge between Montreal and Longueuil will be abandoned in favor of the constuction of a double-track tunnel. The cost of such a tunnel, it is said, will be considerably less than that of a bridge. (Oct., 1906, pg. 583.)

New Brunswick Southern Ry.—An act has been passed at the current session of the Dominion Parliament, authorizing the company to construct a bridge across the St. Croix River at St. Stephen, N.B.; and declaring the line to be a work for the general advantage of Canada. The object of the construction of the bridge is to secure a connection with the Washington County Ry. (Mar., pg. 183.)

Newfoundland Short Line.—H. C. Thomson, who was one of a party of engineers which made a survey in Newfoundland in the fall of 1907, is quoted by a London, Eng., cable as having stated that the result of the survey has been to prove that an easier gradient for a railway through the northern peninsula of the island can be obtained than was thought possible. (Dec., 1907, pg. 889.)

North Lanark Ry.—The Ontario Legislature at its recent session passed an act extending the time for the construction of the lines projected. (Feb., pg. 99.)

Nova Scotia Branch Lines.—A survey has been made by W. A. Hendry, on behalf of the Nova Scotia Government for the construction of a line to connect Port Medway with the H. and S.W.R. main line. The route surveyed extends from the water front to the railway, a distance of about four miles. A good line has been obtained with easy gradients and curvature, which can be constructed at a moderate cost. Port Medway is reported to have one of the best harbors on the south-western coast of the Province, the water being very deep and the harbor well sheltered.

W. A. Hendry recently made a report to the Nova Scotia Government upon the country between Lunenburg and Riverport (formerly Ritcey's Cove), on the east bank of the La Have River, near its mouth, and from Getson's Cove (on the opposite bank of the river) to Port Medway, with a view to the possibility of a railway between these two points. From Lunenburg to Riverport by way of Indian path, a distance of about eight miles, there does not appear to be any important difficulty in the way of railway construction, the greatest height shown by barometer being between 50 ft. and 60 ft. above high water mark, with sufficient distance to overcome it with fairly good grades. The only bridge would be over Cook's Creek, probably of about 80 ft. or 90 ft. span. From Getson's Cove to Petit Rivière, it appears that a line easy of construction could readily be obtained. From Petit Rivière to Broad Cove it will apparently be necessary to divert the line towards the shore as the ground rises too rapidly on the direct route near the main road, then to pass to the north of Broad Cove in order to keep on ground high enough to get a practicable grade over the high land west of Broad Cove. From Vogler's Cove to Port Medway the ground seems quite favorable, and a connection could be made with the H. and S.W.R. near the head of Port Medway harbor between county line and Medway stations. The distance from Getson's Cove to the suggested junction is about 21 miles.

Ontario, Sault Ste. Marie Ry.—The Ontario Legislature at its current session passed an act declaring that the act of incorporation of the O.S.S.M R. Co. is valid and operative, notwithstanding any neglect or fault in complying with the provisions of the same, and extending the time fixed for the construction and completion of the line. The preamble of the act declares that "considerable sums of money have been expended in organizing, preparing plans, making surveys, locating the line and for other purposes, but that owing to the state of the money market and to other causes, including the delay in constructing the eastern division of the National Transcontinental Ry., with which the company desires to obtain connection, it has been impossible hitherto to proceed with the construction of the railway; that the company intends to construct and complete the railway at the earliest possible time and has now arranged for such construction, and for the financing of the undertaking."

The company was originally incorporated by the Legislature in 1881, power being given to construct a railway from near Gravenhurst or at some other point which may be determined upon by the directors, to the French River, thence westerly and northerly to Sault Ste. Marie, and to some point on Lake Superior; and branch lines to Lake Nipissing and Lake Temiskaming. The provisional directors were: J. D. Edgar, H. H. Cook, J. M. Ferris, G. A. Cox, R. Jaffray, J. Holden, W. Gooderham, Jr., Sir W. P. Howland, W. J. Copp, Æ. Irving, and J. M. Williams.

Orford Mountain Ry.—The Dominion Government has entered into a contract, under the act granting aid to certain railways, with the O.M.R. Co., for the construction of a line from Bolton line to Mansonville, Que., 7.54 miles. The work was completed and the line put in operation, July 12, 1907. (Feb., pg. 99.)

Owen Sound and Meaford Ry.—The Railway Committee of the Board of Trade, Owen Sound, Ont., presented a report April 5, advocating the securing of power by the town to construct a railway between Owen Sound and Meaford, under a traffic agreement similar to that of the Guelph Junction Ry., if it is found to be impossible to secure the construction of the line by either the C.P.R., the G.T.R., or the Canadian Northern Ry. A resolution to this effect was adopted by the Board. (Mar. pg. 183.)

Pontiac Central Ry.—The Dominion Senate at its current session has passed an act declaring the projected line of the P.C.R. Co. to be a work for the general advantage of Canada, and authorizing an extension northerly to James Bay, via the Nottaway River valley, and southerly to Brockville. (Jan., pg. 21.)

Prince Edward Island Ry.—The Dominion Parliament at its current session voted the following sums for betterments, etc., on the line:

Increased accommodation and facilities along the line	$ 818.75
Steel rails	1.250.00
New machinery	2.500.00
Spur line and ballast pit	3,750.00
Souris—extension of wharf	2,312.50
Charlottetown—increased accommodation	32,500.00

The Minister of Railways said in the House of Commons recently that the Government had not decided whether or not to grant the petition of the residents of Clifton, Stanley, and Hope River, P.E.I., for the construction of an extension from the main line to Stanley Bridge or vicinity. Neither had any decision been reached as to whether or not surveys would be made this year with a view to extending the railway system along the north shore of the Island.

Tenders were received to April 30, by the Resident Engineer, Charlottetown, P.E.I., for the construction of a spur line to a ballast pit at Surrey, P.E.I. (Mar., pg. 183.)

Quebec and New Brunswick Ry.—The bill asking for authority to construct a line from near St. Charles Jct., St. Anselme or Chaudiere Jct., Que., to the International boundary between Quebec and Maine, near the 13th township of that state, and to make connection with any line in Maine, has been passed by the House of Commons at the current session. (Mar., pg. 185.)

St. Croix to Lepreaux, N.B.—Reports from Calais, on the Maine side of the St. Croix River, state that a syndicate has been formed of Canadian and U.S. people for the purpose of constructing a line from St. Croix, on the C.P.R., opposite Vanceboro, Me., to the seacoast near Lepreaux, N.B., a distance of about 60 miles. The harbor at Lepreaux is reported to be deep and safe for the largest vessels, and subject to considerably less rise and fall of the tide than St. John harbor. The shore is further said to have such a formation that it would be necessary to do but little wharf building, because it is solid ledge and goes off so

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abruptly that the ledges have only to be levelled off to become natural wharves. Another report says while the story looks a good deal like a "pipe dream," yet the people along the St. Croix Valley believe there is something in it.

At the 1907 session of the N.B. Legislature an act was passed incorporating the Canadian Terminal Ry. Co., with power to construct a railway from L'Etang harbor to the village of St. Croix, N.B. Incorporation was originally sought under the title of the Canada Atlantic Terminal Co., the provisional directors being: J. S. Clark, J. D. Chipman, G. W. Ganong, H. I. Taylor, H. F. White, G. W. and W. L. E. Marsh. L'Etang is situated at the entrance to Passamaquoddy Bay, and some miles south of St. George, a station on the New Brunswick Southern Ry., and Lepreaux is a station on the N.B.S.R., 23 miles nearer St. John than St. George, and only a few miles from the coast. It is to the undertaking of the Canadian Terminal Ry. Co. that the report in Calais probably refers. (See Canada Atlantic Terminal Ry., May, 1907, pg. 325.)

Temiskaming and Northern Ontario Ry.—The commissioners have taken over from the contractors the completed section of the line between Englehart and Matheson, Ont., a distance of about 67 miles, making a total of about 205 miles under operation. A sale of town lots at Matheson was held by the Commission Mar. 27, when good prices were realized. Track has been laid for a few miles beyond Matheson, but is still in the hands of the contractors. By an arrangement between the contractors—McRae, Chandler and McNeil—for a 40-mile section beyond Matheson, and the Commission, the work has been placed in sole charge of T. S. Scott.

The question of the construction of a spur from Boston station to the Larder Lake district is being urged upon the Commission, and a survey has been ordered with a view of having plans prepared and laid before the Government.

A proposal for the construction of a line from the main line westerly to Sudbury is under consideration. In 1907 application was made to the Ontario Legislature for an act incorporating a company to construct a line from Sudbury to a junction with the T. and N.O.R., but it was refused, on the ground that the Government would possibly take up the construction of such a line. (April, pg. 247.)

The bridge across the Wateabeag is reported to have been completed and it was expected that tracklaying northerly would be recommenced April 20.

Twin Tree Mines Ry.—Application will be made next session of the New Brunswick Legislature for an act reviving the act incorporating the company, extending the time for construction, changing the names of the incorporators, changing the point of junction with the Intercolonial Ry. to a point between Gloucester Junction and Bathurst stations, and authorizing the continuance of the railway to tidewater at or near Bathurst harbor. G. Gilbert is solicitor for the company.

White Pass and Yukon Ry.—It was reported from Whitehorse, Yukon, April 2, that construction had been started upon the projected spur through the copper district. A U.S. press report says that two miles of grading had been completed and 1.50 miles of track had been laid when construction had to be suspended in 1907, owing to cold weather. This report is apparently a repetition of a previous report to which reference was made in our Feb. issue, pg. 101. (April, pg. 247.)

Winnipeg City Power Plant.—C. B. Smith, Chief Engineer, reported recently that it was expected the Winnipeg River bridge would be completed April 1, and that the track would be laid to the Lee Ave. channel by the end of April. If the spans for the bridge at that point were delivered promptly it should be completed by the middle of May. He recommended that the council arrange to purchase the 1,550 tons of 56-lb. steel rails, with the fastenings necessary to complete the line to Point du Bois. It was desired to have the line ready for the contractor to ship his plant to Point du Bois by the end of June, so as to enable him to make an early start upon the actual construction of the power plant. (April, pg. 247.)

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Rolling Stock in International Service.

The Commissioner of Customs has issued the following memorandum to collectors of Customs:

"Regulations by the Minister of Customs in regard to locomotives and railway passenger, baggage and freight cars running upon any line or road crossing the frontier, as provided in item 595 of the Customs Tariff, 1907, in effect Dec. 1, 1906, as approved by order-in-council.

"Foreign-built locomotives, not owned or leased by any railway company in Canada, may be used duty free on a continuous route crossing the international frontier between a place in the United States and the first Customs port on such route in Canada, or to or from the termination in Canada of what is technically known as the (usual) 'run' of the locomotive if it is beyond the limits of such port.

"Foreign-built passenger cars, sleeping cars and dining cars, not owned or leased by any railway company in Canada, may be used duty free on a continuous route crossing the international frontier while on a through run between a place in the U.S. and the terminus of such run in Canada.

"Foreign-built railway freight and baggage cars, not owned or leased by any railway company in Canada, may be used duty free on a continuous route crossing the frontier while employed (empty or laden) internationally on a through run between a place in the U.S. and a place in Canada.

"Railway rolling stock built in Canada, or which has once paid duty therein, may thereafter pass duty free in Canada.

"Rolling stock owned or leased in Canada, but which has been built outside of Canada and imported into Canada, is not exempt from duty under the foregoing regulations, provided, that the Minister of Customs may by a further order or regulation exempt from duty a portion of the rolling stock for use in international traffic, when it is established to his satisfaction that such rolling stock is owned by a company operating railways in Canada and in the U.S. under the same name, and that the rolling stock of such railway is marked and held in each country under the same name.

"Every railway company in Canada importing locomotives and cars shall deliver to the Department of Customs, from time to time as required, true statements, verified under solemn declaration of an officer of the company having knowledge of the facts, showing the quantity and value of rolling stock owned or leased by such railway company, and which has been built outside of Canada and imported into Canada.

"Note.—The rolling stock of U.S. railway companies has been permitted in the past to carry local goods from one place in Canada to another while on their journey going or returning across the frontier. This concession, however, is not to be permitted to degenerate into an abuse in serving as a cover for the free importation of foreign-built railway cars into the domestic traffic of Canada."

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309,900	116,100+
Nov..	957,400	689,100	268,300	215,700+
Dec..	801,100	558,400	242,700	264,900+
Jan...	578,200	462,500	115,700	226,800+
Feb..	485,600	401,900	83,700	152,400+
Mar.	625,300	453,400	171,900	136,500+
	$6,997,000	$5,017,300	$1,979,700	$1,907,500+

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C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7,010,177.40	4,439,902.25	2,570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
Dec.	6,418,576.38	4,341,386.80	2,077,189.58	188,404.76−
Jan..	4,498,560.80	3,874,569.02	623,991.78	75,664.17+
Feb..	4,129,044.09	3,771,947.48	357,096.61	264,891.51−
	$49,513,100.96	$34,100,989.98	$15,412,110.98	$344,071.45−

Approximate earnings for Mar., $5,374,000, against $6,098,000 for Mar., 1907.

Duluth, South Shore and Atlantic Ry.—Operating revenue for Feb., $186,934.28; expenses, $149,293.10; net revenue, $37,641.18; other income, $3,679.55; interest on bonds, $71,641.67; taxes, $15,500.00; other expenses, $4,744.80; deficit, $50,565.74; against $210,250.41, operating revenue; $169,103.31, expenses; $41,147.10, net revenue; $4,193.66, other income; $71,641.67, interest on bonds; $15,000.00, taxes; $4,645.97, other expenses; $45,946,88, deficit for Feb., 1907. Total operating revenue for eight months ended Feb. 29, $2,117,189.53; expenses, $1,585,146.35; net revenue, $532,043.18; other income, $60,046.39; interest on bonds, $573,133.34; taxes, $129,491.86; other expenses, $77,278.17; deficit, $187,813.80; against $2,092,522.85, operating revenue; $1,429,480.72, expenses; $663,042.13, net revenue; $47,001.99, other income; $573,133.34, interest on bonds; $112,560.95, taxes; $40,069.01, other expenses, and $15,719.18, deficit for same period 1906-07. Approximate earnings for Mar., $218,698, against $259,384.

Mineral Range Rd.—Operating revenue for Feb., $57,340.13; expenses, $58,386.90; deficit, $1,046.77; other income, $260.12; interest on bonds, $6,946.67; taxes, $3,000.00; other expenses, $160.41; deficit, $10,893.73; against $59,394.73, operating revenue; $54,596.62, expenses; $4,798.11, net revenue; $94.05, other income; $6,946.67, interest on bonds; $3,000.00, taxes; $3,323.43, other expenses; $8,377.94, deficit for Feb., 1907. Total operating revenue for eight months ended Feb. 29, $536,683.22; expenses, $446,531.94; net revenue, $90.151.28; other income, $2,992.01; interest on bonds, $55,573.34; taxes, $26,191.08; other expenses, $15,527.84; deficit, $4,148,97; against $507,504.35, operating revenue; $380,055,16, expenses; $127,449.19, net revenue; $2,285.26, other income; $55,573.34, interest on bonds; $24,049.97, taxes; $19,064,67, other expenses; and $31,046.47, surplus for same period 1906-07. Approximate earnings for Mar., $65,703 against $69,360 for Mar., 1907.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Receipts for Feb.; freight, $482,401.71; passengers, $136,452.66; mails, $28,484.60; express, $15,000.00; telegraphs, $3,396.92; miscellaneous, $14,629.26; total, $680,365.15. Operating expenses: Maintenance of way and structures, $73,118.92; equipment, $105,532.94; traffic expenses, $16,556.28; transportation, $300,994.70; general, $16,129.25: total, $512,332.09; against, $504,531.65, freight; $145,587.21, passenger: $24,074.11, mails; $15,000.00, express; $5,069.34, telegraphs; $8,076.90, miscellaneous; $702,339.21, total receipts; $127,206.00, maintenance of way and structures; $117,997.87, equipment; $313,631.80, transportation; $19,759.51, general; $578,595.18, total expenses, for Feb., 1907. Receipts for eight months ended Feb. 29: Freight, $5,668,742.60; passenger, $1,909,199.23; mails, $195,726.64; express, $123,225.85; telegraphs, $41,105.50; miscellaneous, $277,783.87; total, $8,215,783.69. Operating expenses: Maintenance of way and structures, $899.576.34; equipment, $950,978.00; traffic, $156,539.05; transportation, $2,835.99[illegible]1; general, $130,850.54; total, $4,973,935.74; against, $5,880.415.32, freight; $1,823,169.12, passenger; $188,252.44, mails; $128,317.67, express; $54,508.85, telegraphs; $134,502.52, miscellaneous; $8,209,165.92, total receipts; $940,243.52, maintenance of way and structures; $894,045.29, equipment; $2,580,489.01, transportation; $157,565.76, general; $4,572,343.58, total expenses, for same period, 1906-07. Aproximate earnings for Mar., $956,406, against $962,424 for Mar., 1907.

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Grand Trunk Ry. Earnings, Expenses, etc.

Approximate earnings for March, $3,057,944, against $3,571,270 for March, 1907.

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The C.P.R. Division Engineer, Winnipeg, received tenders, April 20, for the construction of a Y.M.C.A. building at Kenora, Ont.

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One six-coupled locomotive with cylinders 18″ x 24″, standard gauge.
Two six-coupled locomotives with cylinders 21″ x 26″, standard gauge.

FOR FREIGHT SERVICE:
One ten-wheeled type with cylinders 18″ x 26″, standard gauge.
One ten-wheeled type with cylinders 18″ x 24″, standard gauge.
One consolidation type with cylinders 28″ x 32″, standard gauge.
Three consolidation type with cylinders 20″ x 24″, standard gauge.
One consolidation type with cylinders 19″ x 24″, standard gauge.

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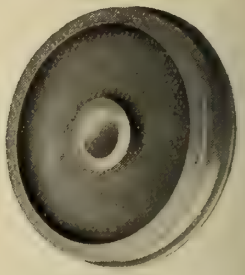

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Atlantic Division Bridges.—Tenders are under consideration for concrete substructures for bridges as follows: Five piers and one abutment at bridge 53.7; and one pier at bridge 54, Woodstock section, and for an 8 ft. concrete arch, 185 ft. long, on the Edmundston branch, at Rideout brook, near Ortonville, N.B.

Fredericton to Minto.—Press reports from St. John, N.B., state that consideration is being given to a project to construct a branch from Fredericton to the Queens County coal mines near Minto, N.B. The company is reported to be applying to the Provincial Government for some coal areas there, with a view of developing them in order to ensure a supply of coal for its locomotives.

Northern Colonization Ry.—Application is being made to the Board of Railway Commissioners by the C.P.R., as lessee of the N.C. Ry., for authority to construct a spur line in Campbell tp., Labelle County, Que., to have a length of 3,385 ft., together with certain other tracks required in the station grounds and a Y.

Construction is in progress upon the extension from Nominingue to a junction with the Ottawa, Northern and Western Ry., at Maniwaki, Que. Six miles of grading has been completed on the first ten mile section out of Nominingue, and grading has been started on the next section, mileage 10 to 35.

Lake Temiscamingue Colonization Ry.—A deputation from Ville Marie, Que., and the surrounding district, recently waited upon C.P.R. officials at Montreal to urge the extension of this line from the wharf at Temiscamingue, Que., to Ville Marie, or other convenient point on the Quebec shore of Lake Temiskaming, so as to give accommodation to a well-settled district.

Montreal-Toronto Second Track.—Considerable progress has been made with the construction of the second track on the line between Montreal and Toronto. The work is being proceeded with as far as Smith's Falls, Ont., and on the 50-mile section from Finch westerly, track is reported to have been laid upon 29 miles.

Improvements at Brockville, Ont.—During the recent inspection of the company's line between Montreal and Toronto by D. McNicoll, First Vice-President, a deputation from Brockville called attention to the state of the company's property there. As a result of the discussion, Mr. McNicoll promised that the deepening of the tunnel through the town to the water front and other improvements suggested would be given every consideration.

Berlin, Waterloo, Wellesley and Lake Huron Ry.—Application is being made to the Board of Railway Commissioners for a recommendation to the Governor-General-in-Council for the sanction of a lease of this projected railway to the C.P.R., for 99 years from Jan. 1, 1908. (Sept., 1904, pg. 311).

Hamilton and Guelph Junction Ry.—The question of the construction of the projected line was discussed between D. McNicoll, Vice-President C.P.R., and S D. Biggar, K.C., and W. J. Grant, Hamilton, representing the H. and G.J.R. Co., April 6. Mr. Grant states that the line will be constructed as soon as the question of the right-of-way through the north-east section of the city has been settled with the Guelph City Council. As soon as this matter is settled the C.P.R. will provide the funds necessary for construction. The Hamilton city by-law granting a right-of-way was given three readings some time ago, but a difficulty arose in connection with the crossing of the Toronto, Hamilton and Buffalo Ry., and nothing further was done. This has now been arranged and it is understood that the by-law will be signed at an early date. The Guelph City Council has undertaken to deal at once with the question of the right-of-way through the northeastern section of that city to the station.

The Walkerton and Lucknow Ry., which has been under construction for a couple of years from Proton, on the Toronto-Owen Sound line, to Walkerton, Ont., is reported to be practically completed. A spur line has been graded from Hanover to Brant, for the convenience of the Durham Cement Co. Surveyors have keen looking over the ground recently with a view, it is said, of locating a line from Hanover to Southampton, via Elmwood, Chesley, Paisley and Port Elgin.

St. Mary's and Western Ontario Ry.—G. E. Hyde, Assistant Chief Engineer, reports that the surveys for the extension of the line from St. Mary's to Sarnia, Ont., have been completed so far as the field work is concerned. The surveys have been in progress since Dec. 10, 1907, and in the 90 working days the men were out the party actually surveyed 264 miles, or about three miles a day. Three lines were run to Sarnia, the first by way of Kirkton, Elmville, Exeter, Crediton, Thedford and Forest to Sarnia; the second line passing through practically the same municipalities only a little to the south of the first one, and the third line was what is known as the south line, passing through or near Granton, Lucan, Ailsa Craig, Parkhill and Arkona to Sarnia. The south line was about three miles shorter than the north one, and the crossing of the Au Sable River was a better one. The office force is now engaged in working out detailed estimates of the cost of the three lines for submission to the directors.

The taxpayers of St. Mary's have passed a by-law authorizing the town council to hand over $40,000 of debentures to the company as a bonus towards the construction of the railway. Application has been made to the Sarnia municipal corporation for aid in a similar way towards the construction.

Toronto-Romford Line. — The finishing touches are being given to the sections of the Bolton-Romford line between Bala and Romford, which had not been completed when work closed down at the end of 1907, and everything is expected to be in order for the putting on of a regular train service June 15.

Georgian Bay and Seaboard Ry.—About 78% of the grading has been completed on the section of this line under contract between Victoria Harbor and Coldwater on the Toronto-Romford line, about 13 miles. The grading is expected to be completed, and track laid during the current season. The Toronto Construction Co. has the contract, and the work is being done under the charge of J. G. Sullivan, Manager of Construction, Toronto.

Moose Jaw Northerly.—Work is reported suspended upon the line under construction from this point towards the branch from Lacombe, Alta., the C.P.R. having notified the contractor that it did not propose proceeding further with the work. J. D. McArthur was given a contract in Aug., 1907, for the grading of 50 miles beyond the end of steel, and is reported to have sent in a considerable amount of plant during the winter.

A letter from the office of the Second Vice-President to the Moose Jaw Board of Trade, April 15, said the grading work on the extension has merely been deferred to permit the company concentrating its efforts on completing the lines now building in the Northwest, and which include the completion of the line for the first 50 miles northwest of Moose Jaw, fit for operation.

Lethbridge to MacLeod, Alta.—The C.P.R. has let a contract to Jause and McDonnell of MacLeod, for the construction of a new line between these two points. The existing line is 38.66 miles, with a gradient of 1% not compensated, and a curvature of 7° 30′, while the new line will be 35.24 miles, with a gradient of 0.4% compensated and 3° of curvature. The country through which the line will pass is described as "bald head prairie," and the estimated cost of construction is put at $15,000 a mile. Work is to be commenced at once and it is expected to have the line completed this season.

Saskatchewan-Alberta Surveys.—Press reports state that the C.P.R. is making surveys in connection with some new construction projects in Saskatchewan and Alberta. A party under the charge of — McMullen recently left Weyburn, and proceeded westerly and northwesterly in the direction of Swift Current. From Swift Current the party went south of the main line and south of the Crow's Nest Pass branch to Lethbridge; thence proceeding northerly they crossed the main line, reaching Sedgwick, and thence proceeded to Edmonton. The work so far has been of a preliminary character.

Weyburn to Stoughton.—A petition has been sent to the directors asking for the extension of the line from Weyburn, Sask., westerly for about 45 miles.

Manitoba and Northwestern Ry.—The line between Lanigan and Asquith, via Saskatoon, Sask., has been inspected by the Government engineers, and was reported ready for passenger service, Mar. 30. Some difficulty has been experienced in getting a supply of water for locomotives, and press statements are made to the effect that a regular train service will not be put on for some time yet.

Greenwood, B.C.—A contract has been let to W. P. Tierney & Co., Nelson, B.C., for the filling in of several large trestles between Castlegar and Cascade, B.C., and for the reconstruction of the Mother Lode spur. The bridge filling is to be completed this season, and will practically eliminate all bridges on the Columbia-Western section of the company's line

Kettle Valley Lines.—Local reports at Grand Forks, B.C., state that the C.P.R. has or will shortly take over the lines and charters of the companies operated as the Kettle Valley Lines, and that construction of the extension up the north fork of the Kettle River will be resumed.

Hardy Bay, B.C.—A press report recently stated that the C.P.R. had bonded for $500,000 a large acreage of water front at Hardy Bay, on the north of Vancouver Island, for the purpose of constructing a terminal station there in connection with a new line across the province through the Yellowhead Pass. The company's officials in Vancouver say there is no truth in the report.

Esquimalt and Nanaimo Ry.—Construction has been started on a spur to connect the present station with the property recently acquired by the C.P.R. for terminal purposes on Chatham St., Victoria. The buildings on the site are being cleared preparatory to tenders being asked for the erection of new freight sheds. The work under way or contemplated during the current year includes the replacing of 11 wooden bridges, five by steel spans on concrete abutments, and six by embankments and concrete culverts for waterways; 40 miles of wire fencing to replace old fences; and the construction of two spurs; the construction of 1,038 ft. of concrete pipes to replace wooden box culverts.

Plans have been filed in the local registry office for the projected extension from Duncans to Cowichan Lake, about 22 miles. The located route follows the Cowichan River valley closely, and will open up a well-tim-

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New railway along the South Shore of Nova Scotia;
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Inquiries on these points to the Industries Dept., Head Office, C.N.R. Bldg., Toronto.

FISHERMAN AND HUNTER

There will be a Canadian Northern exhibit from six Provinces at the Sportsmen's Shows at Toronto (March 21-28) and at Montreal (April 4-11).

Four hundred miles in Nova Scotia. Six hundred in Quebec. Two hundred in Eastern Ontario. Three hundred between Lake Superior and Lake of the Woods. All three Prairie Provinces.

For Hunters and Fishermen who cannot attend the Shows there is plenty of information for the asking.

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bered country. The plans have been approved by the Board of Railway Commissioners, and it is expected that the route will be cleared during the present summer.

International Boundary to Seattle, Wash.—Representatives of an English syndicate have been in Montreal negotiating with the C.P.R. officers with a view of obtaining a guarantee of bonds for the construction of a railway from Seattle, Wash., to the International boundary, where connection would be made with the C.P.R.

Railway Rolling Stock Notes.

The G.T. Pacific Ry. has received four passenger locomotives from the Montreal Locomotive Works.

The Dominion Parliament, at its current session, voted $8,937.50 on account of rolling stock for the Prince Edward Island Ry.

O'Brien and Mullarkey, contractors, Montreal, have ordered a 3-ft. gauge contractors' locomotive, with cylinders 9 ins. by 14 ins., from H. K. Porter Co., Pittsburg, Pa.

The Toronto, Hamilton and Buffalo Ry., between Mar. 15 and April 15, received one switching locomotive, and one freight locomotive from the Montreal Locomotive Works.

The Temiskaming and Northern Ontario Ry., between Feb. 13 and April 13, received the following additions to rolling stock: 5 ten-wheeled locomotives from the Canadian Locomotive Co., Kingston, Ont.; 4 vans, 1 spreader and 3 unloaders.

The Intercolonial Ry., between Mar. 13 and April 13, received 2 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.; 8 passenger locomotives from the Montreal Locomotive Works, and a further consignment of box cars from the Crossen Car Mfg. Co., Cobourg, Ont.

The Hart-Otis Car Co., Montreal, has received orders for 17 forty-ton Hart convertible cars, 34 ft. long, and one Rodgers double plow distributing car for use on the McRae, Chandler and McNeill contract on the Temiskaming and Northern Ontario Ry.; and have sold one Rodger double plow distributing car to M. P. & J. T. Davis, contractors on the National Transcontinental Ry.

The Dominion Parliament at its current session voted the following sums for the Intercolonial Ry.: For rolling stock, $193,750 and $80,000; for providing air brakes to freight cars, $2,625; to exchange draw bars on freight cars, $3,875; for providing side ladders on box cars, $1,250; for providing air brake equipment, $1,312.50; for providing Pintsch gas apparatus, $312.50.

The C.P.R., between Mar. 13 and April 17, placed the following orders for rolling stock: 2 double-track snowplows, 48 flat cars, 4 freight refrigerator cars, 1 passenger refrigerator car, 1 sample coal car, 13 stock cars, 1 standard snowplow, 1 baggage car, 1 mail and express car, 1 superintendent's business car, 127 box cars, at its Angus, Montreal, shops; 18 vans at its Farnham, Quebec, shops, and 2 Hart-Otis ballast cars at the Dominion Car and Foundry Co., Montreal.

The Canadian Northern Ry., between Mar. 15 and April 15, received the following additions to rolling stock: 3 second-class coaches from the Crossen Car Mfg. Co., Cobourg, Ont.; 2 first-class coaches from Rhodes, Curry & Co., Amherst, N.S.; 50 steel ore cars, and 100 steel underframe flat cars from the Dominion Car and Foundry Co., Montreal, 96 Hart convertible cars from the Hart-Otis Car Co., Montreal, and 4 consolidation locomotives from the Canada Foundry Co., Toronto.

In the discussion on a vote for $80,000 for rolling stock for the Intercolonial Ry., the Minister of Railways said in the House of Commons recently that the vote was asked for the purchase of 50 steel coal cars. The railway was badly handicapped for rolling stock for the transportation of coal and the Department bought 50 cars for which there was not a vote. The cars were promised for immediate delivery; they were absolute additions to the stock and not to replace others.

The C.P.R., between Mar. 13 and April 17, received the following additions to rolling stock: 4 locomotives, Pacific type, 4 baggage cars, 24 colonist cars, 139 box cars, 194 flat cars, 31 stock cars, 8 bridge and building dining cars, 8 bridge and building sleeping cars, from its Angus, Montreal, shops; 4 vans from its Farnham, Quebec, shops; 84 Hart-Otis ballast cars from the Dominion Car and Foundry Co., Montreal, and 4 first and 5 second-class Pullman cars for its St. John-Boston service.

Replying to questions asked by R. Blain, M.P., the Minister of Railways stated in the House of Commons recently, that the four motor cars, which were obtained at a total cost of $68,000, were expected to take care of suburban traffic at places like Halifax, St. John and Moncton. The trouble in connection with the cars was partly the expense of manning and operating them, which cost less in Europe than in Canada. There was no doubt of their practicability the one at St. John was in use, and the others would be placed in service shortly.

G.T.R. Betterments, Construction, Etc.

Ottawa Terminals Ry.—C. M. Hays, Second Vice-President and W. Wainwright, Fourth Vice-President G.T.R., were in Ottawa April 10, in consultation with the Premier upon the construction of the new Central station at Ottawa. Mr. Hays, in an interview, said the plans were in the hands of E. H. Fitzhugh, Third Vice-President, and the engineer and architect for revision. The plans and specifications were to come before the city council for approval of the revision April 15, but on the previous day a letter was received from Mr. Hays, Manager, asking for a further extension of time until June 1, for submitting revised plans.

The city council at a meeting, April 16, passed a resolution granting an extension of time to May 15 to file the amended plans.

Kingston, Smith's Falls and Ottawa Ry.—W. Wainwright, Fourth Vice-President G.T.R., said in Ottawa recently that the G.T.R. was prepared to finance and construct the proposed direct line between Kingston and Ottawa, just as soon as the holders of the charter arranged with the municipalities along the line to pay certain bonuses that had been voted. Some of the municipalities have already promised to renew the bonuses originally promised to the K.S.F. and O.R., while others have the matter still under consideration.

Port Hope to Midland, Ont.—Surveys are reported to be in progress for the construction of a second track on the line between Port Hope and Midland, Ont. It is said that the new track will be constructed north of the present line, and in many cases will involve an entirely new line.

Ashbridge's Bay Spur.—In connection with the proposal of the Toronto City Council to construct a spur line to Ashbridge's marsh for the accommodation of industrial plants, which it is desired to have located there, the City Engineer says the G.T.R. holds the key to the situation. The city made an offer which W. G. Brownlee, General Transportation Manager, approved, but which was vetoed by Mr. Hays. The only way the C.P.R. could get a line to the marsh was by constructing along the east bank of the Don, and the city had refused permission for this until the grade was raised. The city council authorized the Mayor to go to Montreal to see if anything could be arranged with the G.T.R.

Holmedale Switch, Brantford.—The Mayor of Brantford has received a letter from W. G. Brownlee, General Transportation Manager, with respect to the city's proposal for the construction of a switch to the Holmedale district for the accommodation of the factories. The company's Resident Engineer made a careful survey of the route approved by the council, along St. Paul's Ave. to Dufferin Ave., to Morrell St., and thence into the Holmedale district, and reported that it would be impracticable to construct such a line. It would involve a curvature of 13°, and a gradient of 2.71%, or 143 ft. to a mile for a distance of 1,650 ft. The heaviest type of locomotive on a 13° curve could only draw four loaded cars. The company is willing to consider the proposal of another route.

Stratford Shops.—Construction has been resumed upon the new buildings at the locomotive shops at Stratford, Ont., so far as the cement work is concerned. The work of erecting the steel framework has been in progress throughout the winter, and is nearly all in position.

London, Huron and Bruce Ry.—Press reports state that this line is to be relaid with heavy steel, and that a second track is to be constructed between London and Wingham, Ont., to accommodate the increasing traffic. Another version of this report is that it is only the line from London to Clinton on which the heavier steel is to be placed, and that the line between Clinton and Goderich is to be improved, so as to enable grain to be carried that way instead of via Stratford, as at present. Superintendent Gillen is quoted as saying that there is no intention of diverting any of the grain traffic that now goes through Stratford from Goderich, through London. The distance from Goderich to Paris via London is 109 miles, while via Stratford it is only 77 miles.

London to Sarnia.—Work was commenced April 14 on relaying the track between London and Sarnia with new rails. The work will take several months to complete.

Walkerville Bridge.—The old bridge across the tracks at Walkerville, Ont., has been taken down, and is being replaced by a new steel bridge large enough to span four tracks. The new bridge was expected to be completed May 1.

G.T. Western Ry.—A U.S. press report states that the company has under consideration a project for constructing a loop for the purpose of putting Kalamazoo on its main line between Port Huron, Mich., and Chicago, Ill. (April, pg. 249.)

Press reports state that the C.P.R. will operate three daily trains across the continent this season, against two in 1907.

The location of the office of J. A. Boak, freight agent, Intercolonial Ry., Chicago, Ill., has been changed from 34 Wabash Ave. to 219 Royal Insurance Building.

The Canadian Steel Products Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $40,000, and offices at Toronto, to carry on the business of steel manufacturers, and to conduct smelters, and other facilities necessary for the conduct of the manufacture of steel, and to operate shops and works for the manufacture of machinery, railway equipment, and supplies for steam and other vessels, etc. The provisional directors are: G. Ruel, G. F. Macdonnell, R. Temple, R. P. Ormsby, and E. E. Wells, all of whom are connected with the Canadian Northern Ry., Toronto.

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MAINLY ABOUT PEOPLE.

D. McNicoll, Vice-President C.P.R., will probably go to Great Britain in July.

C. M. Hays, Second Vice-President G.T.R., and Mrs. Hays, returned to Montreal from Great Britain, April 2.

C. Lindsey, who died in Toronto, April 12, aged 89, was father of G. G. S. Lindsey, K.C., President Crow's Nest Coal Co.

Mrs. Morrow, wife of Jno. Morrow, C.P.R. Right-of-Way Agent, died in the Royal Victoria Hospital, Montreal, Mar. 22.

Sir Thos. G. Shaughnessy, President C.P.R., sailed on the Empress of Britain from St. John, N.B., April 18, for Liverpool, Eng.

D. J. McKenzie, C.P.R. bridge inspector, Nelson, B.C., was killed near the Cascade, Boundary District, Mar. 26, by a falling derrick.

Miss McNicoll, daughter of D. McNicoll, Vice-President C.P.R., sailed from St. John, N.B., April 18, on the Empress of Britain, for Europe.

Sir Sandford Fleming has presented his property on the north-west arm of the harbor to the city council of Halifax, N.S., for use as a public park.

The estate of the late Sir Henry Tyler, formerly President G.T.R., who died in London, Eng., Jan. 20, has been valued for probate at £162,139.

D. D. Mann, Vice-President Mackenzie, Mann & Co., has been gazetted Honorary Lieutenant-Colonel of the 28th Halton Regiment (Lorne Rifles).

Jno. Creelman, only son of A. R. Creelman, K.C., General Counsel C.P.R., Montreal, will be married in June to Miss Katharine Weekes, of Galveston, Texas.

E. Carr Glynn, a partner of Glynn, Mills, Currie & Co., London, Eng., has been elected a director of the G.T. Pacific Ry. in place of Hon. N. Rothschild, resigned.

J. A. Keir, who has been G.T.R. station agent at St. Mary's and St. Mary's Junction, Ont., since 1885, has been retired under the operation of the pension rules.

Mrs. Renton, wife of G. Renton, travelling locomotive engineer, G.T.R., who was killed in a collision at London, Ont., in Feb., 1907, has been awarded $5,000 as compensation.

The engagement has been announced of W. Harty, son of W. Harty, M.P., President Canadian Locomotive Co., Kingston, Ont., to Miss E. A. Kerr, daughter of Senator Kerr, Toronto.

Miss A. E. Woollatt, daughter of W. Woollatt, Walkerville, Ont., formerly General Superintendent Lake Erie and Detroit River Ry., was married recently to E. C. Scythes, Toronto.

P. A. Peterson, Chief Engineer Guelph and Goderich Ry., has been presented with an address and gold-headed cane, by the engineering staff under him on the construction of the line.

C. W. Spencer, formerly General Manager Mackenzie, Mann & Co.'s Eastern Lines, Mrs. and Miss Spencer, have returned to Montreal from an extended tour in the U.S. and Western Canada.

K. R. V. Andras, at one time in the G.T.R. employ at London, Ont., and for the last five years with Drummond, McCall & Co., Montreal, died there April 7, after an operation for appendicitis.

H. A. Fissiault, who has been in the Government service since 1860, and who was law clerk of the Department of Railways and Canals for several years, died at Ottawa, April 15, aged 80.

W. Grundy, heretofore chief clerk G.T.R. city ticket office, Toronto, and formerly G.T.R. ticket agent at Toronto Jct., has been appointed Manager of the Union Stock Yards, Toronto Jct., Ont.

U. Barthe, Secretary of the Quebec Bridge and Ry. Co., has been ordered to pay $800 damages and costs for libelling a city alderman at Quebec, in his newspaper. An appeal has been entered.

Hon. N. C. Rothschild has resigned his position as a director of the G.T.R., and the G.T. Pacific Ry., on the ground that his business engagements will not permit of his attendance at the meetings.

P. W. and J. R. Thomson, shipowners, St. John, N.B., are provisional directors of the St. John Garage and Motor Co., which has recently been incorporated under the New Brunswick Companies Act.

C. E. A. Carr, formerly Manager of the London, Ont., Street Railway, and latterly Manager of the Helena, Montana, Light, Power and Traction Co., has been elected Managing Director of the Quebec Gas Co.

W. R. Mason, Second Vice-President, and D. W. Hawksworth, Assistant to the Second Vice-President Dominion Car and Foundry Co., Montreal, have resigned, their resignations having taken effect April 1.

C. Fraser was presented with a gold watch and chain by C.P.R. employes at Kenora, Ont., April 5, on retiring from the position of yardmaster there to take up duties as Trainmaster, G.T. Pacific Ry., Saskatoon, Sask.

Mrs. A. Piers, wife of the Manager of the C.P.R. Steamship Department, sailed for England in April, and expects to return to Montreal at the end of the summer, preparatory to leaving Canada to reside in England.

W. W. Goodwin, who has been in the G.T.R. dispatching service at London, Ont., since 1855, and T. Marshall, who has been section foreman at Belleville, Ont., for many years, have been retired under the pension fund rules.

H. R. Charlton, G.T.R. Advertising Agent, is in charge of the arrangements of the company's exhibition at the Franco-British Exhibition to be opened in London, Eng , in May. Mrs. Charlton and family are accompanying him.

T. H. Luscombe, London, Ont., who is connected with the South-Western Traction Co., and other electric railway projects in Western Ontario, was Head Banker of the Woodmen of the World, at the recent biennial conference.

I. Edrado pleaded guilty in Montreal, recently, to sending a letter in the name of the Black Hand Society, to Madame Forget, wife of Senator Forget, President of the Richelieu and Ontario Navigation Co., and was sentenced to a term in jail.

W. Mackenzie, President Canadian Northern Ry., Mrs. and the Misses Bertha and Ethel Mackenzie sailed from New York for Europe April 28. Miss Kathleen Mackenzie remains at Benvenuto, Toronto, where Scott and Mrs. Griffin are guests.

H. Logan, Travelling Freight Agent, Canadian Northern Ry., Toronto, was presented with a cabinet of silver by the C.N.O.R. staff and freight officials of other lines, on April 25, on the occasion of his leaving for Los Angeles, Cal., to marry Miss Solano.

Lieut. W. Middleton, who was in command of the torpedo boat destroyer Tiger, when she was cut in two by H.M.S. Berwick, during manœuvres off the Isle of Wight, April 2, and who was, with the majority of the crew, drowned, was a son of F. Middleton, of Ottawa, Ont.

Major Swinford, General Agent Northern Pacific Ry., Winnipeg, read a paper on transportation before the Canadian Club, at Edmonton, Alta., recently, in which he gave some most interesting facts respecting the early transportation history of the Canadian Northwest.

The Toronto Board of Trade will entertain Sir Thos. G. Shaughnessy, President C.P.R., to dinner, on the occasion of the opening of the C.P.R. line through the Muskoka country to Sudbury, and the inauguration of the direct C.P.R. train service between Toronto and Winnipeg, in June.

W. H. Rosevear, formerly Car Accountant G.T.R., Montreal, was given a dinner by the Eastern Car Accounting and Car Service Officers at the recent half-yearly meeting in New York, on the occasion of his retirement from railway service. He is a charter member and Past President of the Association.

A. Gordon was presented with two travelling bags filled with silver toilet articles, for himself and wife, on behalf of the Canadian transportation interests, recently, on his retiring from the position of Assistant Manager King Edward Hotel, Toronto, to again become Assistant Manager of the Hotel Victoria, New York.

A. J. Gorrie, Managing Director, George Hall Coal Co., Montreal, and formerly General Superintendent, Canadian Northern Quebec Ry., who recently returned to Canada after visiting in Scotland, was entertained at dinner at Glasgow, before sailing, by a number of former associates connected with the Caledonian Ry.

W. Readman, a sub-contractor on the G.T. Pacific Ry. bridge construction at the crossing of the Battle River in Saskatchewan, was drowned in the river April 17. He jumped in to endeavor to save some of the workmen who had been thrown into the water owing to the upsetting of a scow. Four were drowned as the result of the accident.

D. R. McBain, who was recently appointed Assistant Superintendent of Motive Power, New York Central and Hudson River Ry., east of Buffalo, N.Y., has been presented with a service of silver plate by the motive power staff of the Michigan Central Rd. Mr. McBain was Master Mechanic of the M.C.R. at St. Thomas, Ont., prior to being appointed Assistant Superintendent of Motive Power of the same road, at Jackson, Mich.

Thos. Meaney, who died at Montreal, April 7, was head of the firm of Meaney & Co., lumbermen, Toronto. In early life he was auditor of the old Northern Ry. of Canada, and latterly has been associated with J. and G. Clark, New York, in the development of pulp limits at the Seven Islands, in the Gulf of St. Lawrence, under the charter of the North Shore Power, Ry. and Navigation Co. The company constructed seven miles of railway.

W. E. Waugh, who died recently at Milwaukee, Wis., was for 20 years agent there for the Commercial Express, the G.T.R. fast freight line. He entered railway service on the old Great Western Ry., as telegraph operator at Hamilton, Ont., serving subsequently as train dispatcher at London, and was later on Assistant Superintendent and Trainmaster, Detroit, Grand Haven and Milwaukee Ry., at Detroit, Mich. R. E. Waugh, G.T.R. ticket agent, Stratford, Ont., is a brother.

M. M. Reynolds, who has been appointed fifth Vice-President, G.T.R., and third Vice-President G.T. Pacific Ry., Montreal, was for 11 years prior to Jan., 1892, Auditor, Mexican National Rd., Mexico, at which date he was appointed General Auditor, Central Vermont Ry., St. Albans, Vt., which position he held for a number of years, subsequently returning to Mexico, on the amalgamation of several Mexican railroads under the name of the National Lines of Mexico, as Comptroller.

Capt. C. E. Kingsmill, who has been mentioned in connection with an appointment under the Canadian Government, as Commander of the cruiser fleet, is now the senior captain of the Royal Navy, and will, in the

(Continued on page 345.)

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TORONTO, CANADA, MAY, 1908

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◆

Names of Government Railways.—A resolution was submitted to the House of Commons, April 6, to the effect that the names, Intercolonial Ry. and Prince Edward Island Ry., be dropped, and the name Interprovincial Ry. substituted therefor; that the Government system of railways should be considered as one entity in the keeping of accounts and in all other respects; and that the ferry service across the Straits of Northumberland should be owned and managed by the Department of Railways, winter and summer. After a debate the motion was withdrawn.

The York Construction Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $100,000 and offices in Toronto, to construct and equip public and private works of every kind, and to carry on the business of general contractors. W. B. Russel, A. Lothian, C. W. Dill, S. Johnston, and R. H. Parmenter are provisional directors.

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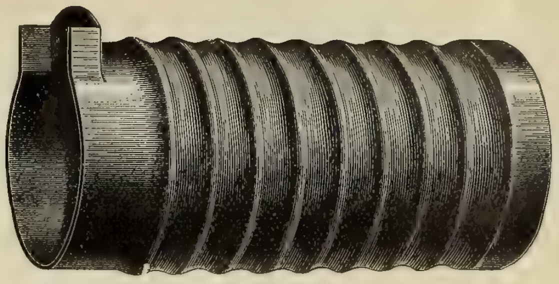

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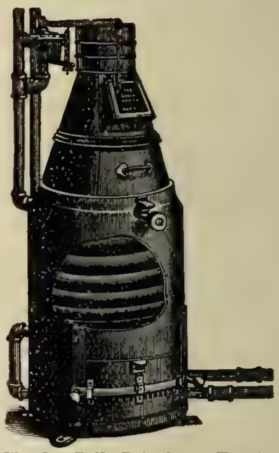

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MAINLY ABOUT PEOPLE.

(Continued from page 341)

ordinary course, be promoted to the rank of Rear-Admiral in May. He is at present Captain of H.M.S. Repulse, and is in command of a division of special service vessels, stationed at Devonport, Eng. This command he would vacate on promotion to flag rank.

D. E. Brown, who recently resigned his position as General Superintendent C.P.R. Trans-Pacific Steamship Line, at Vancouver, B.C., has, in partnership with H. C. Macaulay, who for the past 10 years has been in mercantile business at Dawson, Yukon, established the firm of D. E. Brown & Co., to carry on, at Vancouver, a general railway and steamship passenger and ticket agency, and also to act as ship and general brokers, loan, investment, lumber, estate and marine and fire insurance agents.

E. Arnold, who has been appointed Freight Claims Agent, G.T.R., Montreal, was born at Kingston, Ont., Aug. 26, 1864, and entered G.T.R. service in the transportation department, Montreal, Nov., 1880. After acting as agent at various points between Montreal and Toronto, he was consecutively, 1886 to 1887, in the local freight department, G.T.R., Detroit, Mich.; 1887 to 1890, at Chicago, Ill.; 1890 to date of present appointment, Lost Freight Agent, Battle Creek, Mich. Entire service with G.T.R.

B. A. Neisser who has been appointed Freight Claims Auditor, G.T.R., Montreal, entered railway service with the M.C.R., in the local freight department, Battle Creek, Mich., 1868; since when he has been, 1878 to 1896, connected with G.T.R. subsidiary lines, as chief clerk claims division, treasury department, at Port Huron and Detroit, Mich. On the amalgamation of the G.T.R. subsidiary lines, with headquarters at Montreal, in 1896, he was appointed chief clerk to the Freight Claims Agent, which position he held up to date of present appointment.

A. E. Rosevear, who has been appointed Assistant General Freight Agent, G.T.R., Montreal, entered G.T.R. service in 1879, since when he has been consecutively: 1880 to 1885, clerk, General Superintendent's office, Montreal; 1885 to 1890, stenographer to General Manager; 1890 to 1892, accountant, G.T.R., West Shore Fast Freight Line, Chicago, Ill., and Detroit, Mich.; 1892 to 1898, accountant Reading Despatch Line, Detroit, Mich.; Oct. 1, 1898, to date of present appointment, Freight Claims Agent, Montreal. Entire service with G.T.R.

Stuart S. Oliver, who has been appointed Engineer of Maintenance, Canadian Northern Quebec Ry., and Quebec and Lake St. John Ry., was born at Quebec, Sept. 9, 1858, and educated at the Quebec High School and Morrin College; studied engineering and land surveying, and was admitted to practice in April, 1880. Employed as an assistant engineer on the Quebec Central, Waterloo and Magog, St. John's and Sorel Railways. In 1886 entered Quebec and Lake St. John Ry. service as assistant engineer; appointed Auditor in 1896, holding that position until his present appointment.

R. W. Drew, who was recently appointed acting General Freight Agent, C.P.R., Kootenay and Boundary districts, Nelson, B.C., was born at Kingston, Ont., Feb. 17, 1874, and entered railway service as clerk in general office, Kingston and Pembroke Ry., May, 1894, remaining with that company as operator and agent at various points until May, 1896; since when he has been: June, 1896, to Sept., 1898, clerk C.P.R., Arrowhead, B.C.; Sept., 1898, to April, 1903, local agent C.P.R., Nelson, B.C.; April, 1903, to date of present appointment, chief clerk General Freight Agent's office, Nelson, B.C.

C. Drinkwater, Senior Assistant to the President, C.P.R., in charge of the company's parliamentary work, died in Montreal April 23, of pneumonia, after only a week's illness. He was born Nov. 17, 1843, and entered railway service in 1859, as clerk with the Manchester, Sheffield and Lincolnshire Ry., now the Great Central Ry., subsequently transferring to the Great Northern Ry. in 1861. Coming to Canada in 1864, he acted for ten years as secretary to the late Sir John A. Macdonald, after which he was from 1874 to Feb., 1881, chief assistant to the Managing Director G.T.R., and from Feb., 1881, to Mar. 1908, Secretary C.P.R. On May 1, 1901, he was also appointed Assistant to the President, holding the combined offices until Mar., 1908, when he relinquished the position of Secretary, in order to devote himself to the company's parliamentary interests, with the title of Senior Assistant to the President.

John Torrance, who died at Montreal, April 6, aged 72, was the son of D. Torrance, who was a steamship agent there when the port of Montreal was in its infancy. He entered business life with the firm of D. Torrance & Co., and subsequently became its principal. During his connection with marine interests, he held many offices, being elected a Harbor Commissioner in 1894, and again the following year, and in 1899, serving nine years altogether in that capacity, after which he was associated with the Commissioners in their various tours of inspection of maritime and lake ports both in Canada and the U.S. He was also Canadian manager and agent for the Dominion Line Steamships, plying between Canada and Great Britain, from the initiation of the service down to his retirement from active business life in 1905. He is survived by a widow and two sons, one of whom is local manager of the Dominion Line at Portland, Me., while G. Torrance, freight agent, same line, Toronto, is a brother.

C. A. Hayes, who has been appointed General Freight Agent, G.T.R., Montreal, was born at West Springfield, Mass., Mar. 10, 1865, and entered railway service 1882, since which his record has been: 1882 to 1884, clerk Freight Auditor's office, Connecticut River Rd., now Boston and Maine Rd.; 1884 to Oct., 1887, similar position Boston and Lowell Ry., at Boston, Mass.; Oct., 1887, to Nov., 1890, clerk in office of General Freight Agent, Boston and Lowell Ry., and its successor, the Boston and Maine Rd.; Nov., 1890, to June, 1892, General Freight and Passenger Agent, Central New England and Western Ry., at Poughkeepsie, N.Y.; June, 1892, to Oct., 1892, Division Freight Agent, Philadelphia and Reading Rd. while it had control of the C., N.E. and W. Ry. at Hartford, Conn.; Oct., 1892, to June, 1896, New England Agent National Despatch Line at Boston, Mass.; June, 1896, to July, 1899, New England Agent and Acting General Manager National Despatch Line at Boston; July, 1899, to May, 1903, Manager National Despatch Great Eastern Line, Buffalo, N.Y.; May, 1903, to April, 1908, Assistant General Freight Agent, G.T.R., Chicago, Ill.

J. E. Dalrymple, who has been appointed Assistant Freight Traffic Manager, G.T. Pacific Ry., Winnipeg, and whose portrait appears on the first page of this issue, was born in Montreal, Jan. 1, 1869. He entered railway service as apprentice in the Treasurer's office of the G.T.R., July 1, 1883, in which office he served until 1890 in various capacities, and finally as correspondence clerk. He left Montreal April 1, 1890, and entered the service of the Chicago and G.T.R. at Chicago, as Secretary to Traffic Manager Reeve. On Feb. 1, 1896, he was appointed Secretary to General Traffic Manager Reeve, of the G.T.R. System at Montreal. On May 1, 1899, he was appointed Division Freight Agent, G.T.R., at Hamilton, Ont. On Aug. 1, 1899, he was appointed Division Freight Agent, G.T.R., at Detroit, also Manager of the G.T. Despatch, a fast freight line operating over the G.T. Ry., West Shore Rd. and Fitchburg Rd. On May 1, 1900, he was appointed General Freight Agent of the Central Vermont Ry., and was subsequently made assistant to the General Manager G.T.R., when G. B. Reeve was appointed to that office in 1902, returning to the Central Vermont Ry. as General Freight Agent on the return of C. M. Hays to the G.T.R. in 1903, which position he held until his appointment as General Freight Agent G.T.R., Montreal, Aug. 14, 1905.

P. S. Archibald, General Manager Elgin and Havelock Ry., Moncton, N.B., who has also been appointed N.B. Government Commissioner for the operation of the N.B. Ry. and Coal Co., was born at Truro, N.S., March 21, 1848, and educated at the Truro model and normal schools. He joined the survey staff of the I.C.R. in 1867, under Sir Sandford Fleming, as chainman, and was appointed Assistant Engineer in 1871, since which his record has been: 1873 to 1874, Engineer in Charge of Construction, I.C.R., between Amherst and Truro, N.S.; 1874 to 1878, Assistant to the Chief Engineer of Maintenance of Way, I.C.R., at Moncton, N.B.; 1878 to 1879, Acting Chief Engineer, I.C.R., at Moncton; 1879 to 1897, Chief Engineer, I.C.R., at Moncton. Since 1897 he has been practising as a consulting engineer, with office at Moncton. He was a member of the Commission appointed in 1894 to enquire into the freight rates charged by the C.P.R. in Manitoba and the Northwest Territories. In 1901 he was Chief Engineer in charge of the preliminary surveys and the preparation of plans for the projected bridge over the Strait of Canso, and in 1902 was appointed third arbitrator in connection with the $2,000,000 claim of R. G. Reid against the Newfoundland Government. He is a member of the Canadian and the American Societies of Civil Engineers.

Canadian Freight Association.

At the annual meeting at Montreal April 16, the following were elected: President, J. F. Chapman, General Freight Agent, Bay of Quinte Ry., Deseronto, Ont; 1st Vice-President, J. J. Mossman, General Agent, Wabash Rd., Buffalo, N.Y.; 2nd Vice-President, M. H. Brown, General Freight Agent, C.P.R., Toronto.

Advisory Committee—W. R. MacInnes, J. Pullen, G. C. Ransom.

Executive Committee—W. B. Bulling, J. J. Mossman, J. E. Dalrymple.

Classification Committee—W. B. Bulling, S. P. Howard, F. J. Watson, C. E. Dewey, W. M. Kirkpatrick, H. E. Macdonell, W. Phillips, J. E. Dalrymple, L. Macdonald.

Freight Inspection Committee—R. A. Carter, F. Conway, F. F. Backus, M. H. Brown, S. P. Howard, G. Tombs, R. W. Long, J. Paul, J. F. Chapman, W. B. Bamford.

A resolution was passed expressing the Association's profound regret at the untimely death of A. C. Killam, Chief Railway Commissioner, and its deep sense of the loss thereby sustained by the railway interests, and stating that by his high sense of honor and fairness, together with his great ability and vast knowledge of all matters with which he dealt, he was looked up to and honored by every member of the Association.

It is understood that the Association's summer meeting will be held at Portland, Me.

* * *

The C.P.R. has announced that it will put in operation a through train service between Toronto and Winnipeg over its direct line, via Sudbury, Ont., commencing June 15. The new train will be known as the Toronto Limited, and will make the run in 36 hours.

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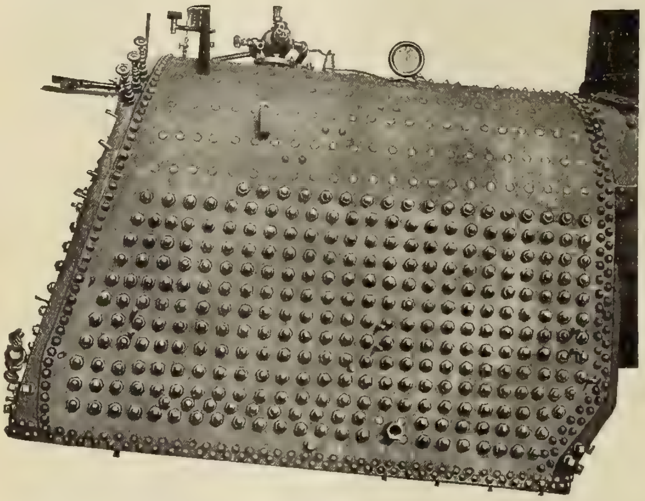

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National Transcontinental Railway.

The Dominion Parliament at its current session voted $3,750,000 on account of surveys and construction; $250 as remuneration of A. Brunet, Government director G.T. Pacific Ry. Co., and $3,500 on account of inspection of the G.T. Pacific Ry.

In a recent speech in the House of Commons the Minister of Railways said the length of the Government section of the line from Moncton, N.B., to Winnipeg, Man., was 1,807 miles, and with the exception of about three or four miles at the entrance to the Winnipeg terminals, and a few points where revision may be made of the present location to reduce gradients, and distances on work, the location surveys had been completed. The necessary rails and fastenings covering the portions of the line under contract, excluding the 365 miles placed under contract at the end of March, had been arranged for, and a large portion delivered. The ties for the 150 miles west of the St. Lawrence River and the 245 miles easterly from Winnipeg, had been contracted for and large deliveries had been made. The ties for the other contracts previously let were included in the contract for grading. Contracts for the steel bridges required on the 150 miles westerly and 50 miles easterly of the St. Lawrence River, and for the 245 miles easterly from Winnipeg, were all entered into and considerable progress had been made for the manufacture and erection of the same. Replying to a question in the House of Commons, April 14, the Minister of Railways said contracts had been let for the whole distance from Moncton, N.B., to Weymontachene, Que., 193 miles west of Quebec, and 656 miles west of Moncton. Between Weymontachene and Winnipeg, 1,147 miles, there were under contract 571 miles, the gaps being: from Weymontachene westerly for 221 miles; from Lake Superior Junction east, 148 miles; and from the section to be constructed east and west of the Temiskaming and Northern Ontario Ry. westward, 204 miles. The estimated cost of the sections under contract was $44,389,393, and of the sections not under contract, $19,030,173. The average estimated cost of the sections under contract was a little over $36,000 a mile.

With respect to the contracts recently awarded, it is reported that the section between the Tobique River and Grand Falls, N.B., 31.5 miles, let to the Willard Kitchen Co., covers the heaviest work east of the Rocky Mountains. There is a good deal of rock cutting on the work, and the engineering features include the construction of a tunnel over 1,000 ft. long through rock; long bridges over the Salmon and Tobique rivers, and the disposal of a lake. A number of sub-contracts will be let.

The St. John, N.B., Board of Trade has passed a resolution bringing before the Government the importance of St. John as a port, and urging the necessity of the construction of a branch line to connect it with the Transcontinental Railway at Chipman or Woodstock. The Board is desirous of St. John having the same treatment as it is proposed to give to Montreal. A deputation from the latter city waited on the Government, Mar. 31, to urge the immediate construction of a line to give connection with the N.T. Ry., and the Premier in reply admitted that the line would not be complete without a connection with Montreal. The Government, however, had many large works in hand and was being urged to undertake others—additional railways and the Georgian Bay canal. The proposed works could not be undertaken without full consideration, but the present Parliament did not expire for 18 months, so there was plenty of time for the Government to deal with the question and to enter into contracts before the elections came on.

GRAND TRUNK PACIFIC RY.

The Minister of Railways made a statement in the House of Commons recently with respect to the work done upon the main line of the G.T.P.R. The information practically covers the position of construction when work was suspended for the winter, and is as follows:

Grading, Culverts and Wooden Bridges—From mileage 0 to 13. No grading has been done, the work is very light, merely surfacing. From mileage 13 to 650. The grading is practically completed, merely a few narrow cuttings remaining to be widened, and a few embankments not yet fully brought up to grade level, to be completed. The culverts and wooden structures are about completed. From mileage 650 to 796. Considerable grading has been done in patches, aggregating about 54 miles. There, however, yet remain about 1,750,000 cubic yards of excavation to be done to complete the grading. A large proportion of the culverts are built and the pile foundations of about 75 per cent. of the bridges are driven.

Steel Bridges.—Mileage 45. The Assiniboine River is to be crossed by a steel bridge 415 ft long, 34 ft. high, one span of 255 ft. and two spans of 80 ft. each. The concrete piers are in course of construction, one having been completed and three others being worked upon, but not far advanced beyond the excavation of foundation, which is completed. At mileage 469. The South Saskatchewan River is crossed by a steel bridge 1,497 ft. long and 74 ft. high; of one span 50 ft., one of 127 ft., one of 175 ft. and five of 229 ft. The concrete piers and abutments are completed, and the steel superstructure is delivered at the site of the structure. Two spans are erected and the work of erection is being continued. At mileage 675. The Battle River is to be crossed by a steel bridge 2,770 ft. long and 180 ft. high. The work is in progress on the concrete piers, pedestals and abutments, of which there will be two piers, 100 pedestals and two abutments. Many of the foundations are excavated, but concreting may be said to have only just been commenced. Work is still in progress, the piers, etc., being housed in and kept warm during the building up of the concrete. At mileage 787. The North Saskatchewan River is to be crossed by a steel bridge 1,647 ft. long, 136 ft. high; of four spans 40 ft., 10 of 50 ft., two of 150 ft., three of 229 ft. The 28 concrete pedestals, two abutments and two of the piers are completed. The work of building the last remaining two concrete piers is in progress; they are housed in and kept warm during the progress of the work. In addition to the steel bridges mentioned, there is the bridge over the Assinboine River at St. Lazare—at mileage 203—250 ft. long, which is being crossed by a temporary timber structure.

Tracklaying and Ballasting.—Track is laid from mileage 45 to mileage 326, and from mileage 426 to mileage 468, aggregating 310 miles; in addition to which 47 sidings are laid in. From mileage 53 to 140, the road is full ballasted and lifted. From mileage 140 to 213, it is half ballasted with a first lift.

Buildings, Etc.—At mileage 43 (Portage la Prairie) a union station of brick is in course of erection, and is nearing completion. At mileage 141 (Rivers) a station is in course of erection. At mileage 385 (Nokomis) a station has been erected. At mileage 141 (Rivers divisional station) an engine-house and machine shop and boiler-house are in course of erection; the work is advanced to the extent of about 90%. At mileage 277 (Melville divisional station) an engine-house and machine shop are in course of erection; about 35% of the work is executed.

Watertanks, Fencing, Etc.—At mileage 141 (Rivers divisional station, a well and watertank are being provided, about 80% of the work being done. A watertank and pump have been erected at mileage 202; and about 25% of the work has been done on a watertank at mileage 217. West of Portage la Prairie, Man., 46 miles of fencing have been put up. A telegraph line has been erected for 271 miles.

No construction has been done west of Edmonton, Alta., with the exception of a wharf at Prince Rupert. The route through the Rocky Mountains is to be by the Yellowhead Pass, which is considered to be a better pass in every way than any of the others except so far as the curvature was concerned. The grades are easier, but the curvature is greater. The total cost is considerably less, and the Government is interested in this on account of the guarantee of bonds given. The estimated cost of the line by the Yellowhead Pass route, exclusive of terminals, is $42,115,500, being $4,536,100 less than the cost by the Pine River Pass route; $3,490,000 less than by the Wapiti Pass route, and $6,251,000 less than by the Peace River Pass route. The distance from Edmonton to the Pacific Ocean by the selected route is 955 miles.

Of the Prairie section of the G.T. Pacific Ry., it is anticipated that the portion between Winnipeg and Edmonton, about 793 miles, will be completed and opened for traffic this year. F. W. Morse, Vice-President and General Manager, who returned to Montreal, April 2, stated that there remained about 40 miles of line to be completed between Portage la Prairie and Saskatoon, and some few miles between Portage la Prairie and Winnipeg. The company is working to complete these portions of the line with a view of instituting a train service between Winnipeg and Saskatoon July 1. A despatch from Portage la Prairie, April 14, stated that tracklaying had been resumed on the line towards Winnipeg, and it was expected to complete the tracklaying into Winnipeg early in May. Tracklaying is also in progress on the remaining portion of the line connecting up Saskatoon. The last span of the bridge over the South Saskatchewan River at Saskatoon has been completed, and construction trains were operated over it early in April.

West of Saskatoon, with the exception of the work at a small muskeg 25 or 30 miles out, the grading has been finished as far as the Battle River, where the steel building gang will take up work early in the summer. About 220 miles of track will have to be laid between Saskatoon and the Battle River, and it is possible that track will be laid to that point from Edmonton easterly, so as to facilitate bridge construction. The substructure for the bridge at Clover bar is reported complete, and the steel superstructure is ready for shipment from the Canadian Bridge Co.'s works, Walkerville, Ont., as soon as the spur line from the Canadian Northern Ry. to the river is completed. The substructure for the bridge is being constructed by John Gunn & Sons, and it is expected to have it ready for the steel superstructure early in June. Between Battle River and Edmonton, grading is being pushed by the contractors, Foley, Welch & Stewart. There is reported considerable heavy work to be done on this portion of the contract between Battle River and Tofield, near Strathcona, particularly on the north side of Grattan Coulee, on the first twenty-five miles north of the river. On the line between Winnipeg and Edmonton, C. M. Hays, President, recently stated that about 200 new townsites would be brought into existence during the year, either along the track, or on the 10-mile stretch on either side, which was rapidly filling up with settlers. The committee of the company's officials has completed the task of naming the townsites along the line. There are 114 and the names selected

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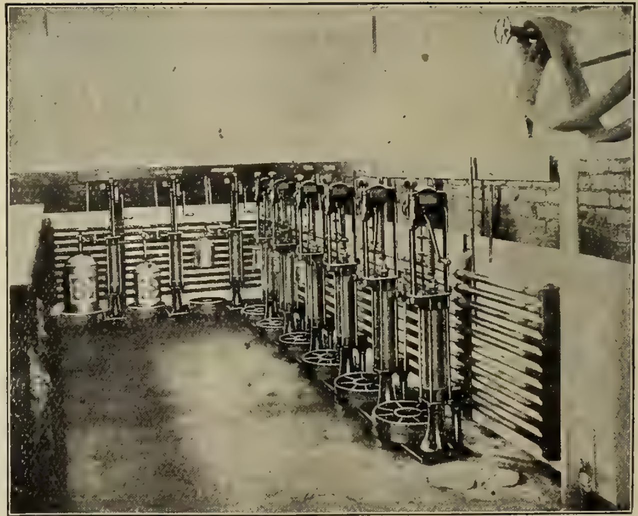

BOWSER PUMPS IN A RAILWAY STOREHOUSE

include those of directors, officers and officials of the company. The divisional points, with their distances from Winnipeg are: Rivers, 142 miles; Melville, 277 miles; Waterous, 407 miles; Biggar, 526 miles; Wainwright, 600 miles. R. W. Jones, Divisional Engineer on Construction, has transferred his headquarters from Saskatoon to Edmonton.

The contract let to the Foley firm for the construction of 116 miles westerly from Edmonton to Wolf Creek, covers the remainder of the Prairie section of the line. It is expected that this portion will be well in hand by July, and it is hoped to have the work completed in the fall. Sub-contracts have been let for over half of the mileage, and the contractors' outfits began to go out from Edmonton early in April. The country through which the route passes is rolling prairie, and commencing at about Lake Wabamun, a gradient of 0.4% will have to be constructed in order to cross the mountains with this uniform gradient. This, the contractors state, will necessitate considerable extra work. There is also considerable muskeg west of Edmonton, but the work of constructing the line across them is not difficult, although tedious. F. W. Morse, Vice-President, stated in Montreal, April 2, that invitations had been sent out for tenders for a further stretch of 179 miles west of Wolf Creek, which would carry the line about 50 miles west of the Yellowhead Pass. This stretch would be divided into sections of 40, 60 and 79 miles, respectively, in order to facilitate construction. It is expected that contracts will be awarded early in June, so that work can be pushed ahead during the present construction season.

Reports from the Pacific coast state that the survey parties from Kitsalas Canyon and Hazleton on the Skeena River, B.C., have been transferred to the Copper River, and are now working towards the head of that stream. This has caused a revival of the reports that the Hazleton route, previously surveyed, is to be abandoned in favor of the Copper River route, which it is said will shorten the distance to the coast by from 80 to 90 miles. The route suggested is along the Copper River valley across the watershed, and thence along the Telkwa River valley.

J. W. Stewart, of Foley, Welch and Stewart, who have the contract for grading the 60-mile branch line from tidewater at Kitamaat to the junction with the main line at Kitsalas Canyon, and for the 100 miles of the main line from Prince Rupert to Kitsalas Canyon, passed through Vancouver, B.C., April 4, for Prince Rupert, to superintend the starting of operations. He said these two contracts would aggregate approximately $10,000,000, and between 5,000 and 6,000 men would be employed for about a year and a half. A good deal of the work will be sublet. The heaviest work on the entire line is to be found in the 100-mile section easterly from Prince Rupert. Ten miles after leaving Prince Rupert the line strikes the Skeena River, following the northern bank of the river until the Kitamaat branch is reached. The grade will have to be blasted out of the solid rock for the entire distance, but there will be only one tunnel, and that only 300 ft. long. The work on the Kitamaat branch will not be so heavy as on the main line, but most of it will be of the heaviest description, as several tunnels will have to be driven through solid sock. The contractors' plant began to arrive in Vancouver, from Kenora, Ont., April 9, to be shipped north. Mr. Stewart said it would take 500 cars to ship the company's plant and equipment, including 600 horses to the contract, the cost of transportation being estimated at $200,000.

The grading upon the branch which connects the Eastern Division at Lake Superior Junction with the head of navigation at Fort William, Ont., has been practically completed. Track has already been laid for 125 miles from Fort William, and it is expected that the remaining mileage will be laid during the summer.

Replying to a question in the House of Commons recently, the Minister of the Interior said the G.T. Pacific Ry. Co. had acquired a tract of land along the north part of the Mission Reserve at Fort William, Ont., having a total area of 1,600 acres, for terminal purposes. The price paid was: 150 acres at $320; 250 acres at $160; 300 acres at $80; 700 acres at $40; and 200 acres at $20; the purchase price being paid in cash. The total valuation of the land and improvements was $244,574. The land was granted to the company Jan. 27, 1906. These areas were not surrendered by the Indians, but were acquired under the provisions of sec. 46 of the Indian Act, chap. 81, Revised Statutes of Canada.

An extension of time has been granted by the House of Commons Railway Committee, at the current session of the Dominion Parliament, for the construction of the various branch lines which the G.T. Pacific Branch Lines Ry. Co. has been authorized to build. In the discussion on the bill, W. H. Biggar, K.C., General Solicitor, G.T.R., stated that contracts would probably be let during the summer for the branch lines authorized to be constructed to Calgary, Alta., and Battleford, Sask.; the branch connecting Regina and Yorkton, Sask., and the Brandon-Regina line. The preliminary surveys had been made for the branch southerly from Calgary to the International boundary, and from Regina southeasterly to the International boundary at North Portal. (April, pg. 261.)

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Board of Railway Commissioners.

Chief Commissioner Mabee met the other Commissioners at Ottawa, Mar. 31, to review the position of the cases before the Board. It transpired that of all the cases outstanding there were only three concerning which there was any question with regard to being reheard. These three cases are the Bell Telephone Co.'s tolls; the coal rates between Duluth and Winnipeg; and the C.P.R. traffic. The Commissioners arranged to see all the parties interested with a view of arriving at some mode of procedure.

The public sittings of the Commission were resumed at Ottawa, April 22, the first case set down for hearing being the application of the Canadian Northern Ry. for power to take various pieces of land in the Don Valley district of Toronto, contiguous to the Rosedale ravines. An important matter taken up at these sittings was the uniform operating rules for all railways. The draft set of regulations prepared some time ago by the joint committee of railway officials and representatives of the employes, is being considered, and evidence is being heard upon points in regard to which there is any controversy. On April 24 the Commissioners took up a large number of questions which have been standing for some time in reference to the general grievances, preferred by the railwaymen's union, respecting hours of labor, operating rules, etc. It had been arranged that the railway companies would be represented by a central committee of five, and the officials of the employes' unions would attend to present their cases before the Board.

It has been arranged that the Board will hold a sitting at Toronto early in May, to consider the viaduct and Union Station questions.

At the current session of the Dominion Parliament votes were passed for the following sums: Maintenance and operation of the Board of Railway Commissioners, $11,250; to pay expenses in connection with reference to cases before the Railway Commission, $1,250.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

Drummond, McCall & Co., Montreal, have been awarded the contract for the supply of steel poles, to replace cedar poles on the Guelph Radial Ry.

E. C. Rutherford has been appointed agent of the Goldschmidt Thermit Co.'s Canadian branch, which has been opened at 103 Richmond St. West, Toronto.

W. Abbott, of Montreal, who represents in Canada the manufacturers of Novo high-speed steel drills, etc., has appointed as agents for Ontario, the Milroy-Harrison Co., of 66 Richmond St. East, Toronto, who will carry a stock of these goods.

The American Car and Equipment Co. announces the association with the company of H. H. Sessions and W. H. Horine, who became President and Secretary-Treasurer respectively. They are well known in railway and financial circles.

The receivers appointed for the Westinghouse Machine Co., of Pittsburg, Pa., Oct. 23, 1907, have been discharged by the court, all of the matters which made a temporary receivership expedient having been satisfactorily arranged. W. H. Donner has been elected Vice-President of the company in charge of all its activities.

The Banwell Hoxie Wire Fence Co., Ltd., Hamilton, Ont., reports having again secured the contract for maintenance fencing for the C.P.R. Winnipeg-Calgary division. They had this work also last season, as well as considerable fencing along new lines, of which they have yet some 200 miles to complete. They have also considerable fencing to supply for the National Transcontinental Ry. in the Quebec district.

"Staybolts—their use and abuse," an article written by John Hickey, for many years a prominent master mechanic and superintendent of motive power, also a former President of the American Railways Master Mechanics' Association, and the author of several papers on the construction and care of locomotive boilers, has been issued in booklet form. Copies will be sent on application to the Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio.

H. K. Porter Co., builders of light locomotives, Pittsburg, Pa., have issued a tenth edition of their catalogue, devoted exclusively to illustrating and describing their steam locomotives. It is most thoroughly up-to-date, and the locomotives shown are models of modern practice. The catalogue also contains about 80 pages of useful engineering information. The H. K. Porter Co. is now prepared to build locomotives up to 17 ins. diameter cylinders. They state that in the interval since the issue of the ninth edition of their catalogue the progress in the increased power, efficiency and quality of their locomotives, has been far greater than during any similar period in their history, and their export, as well as their home trade, has increased very largely.

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The Ontario Legislature, last session, passed an act confirming a by-law of the united townships of McLean and Ridout, granting a ten years' assessment of $5,000 on the hotel which the Canada Ry. News Co. proposes to erect at Norway Point, Lake of Bays district. The company desired to obtain a fixed assessment for fifteen years.

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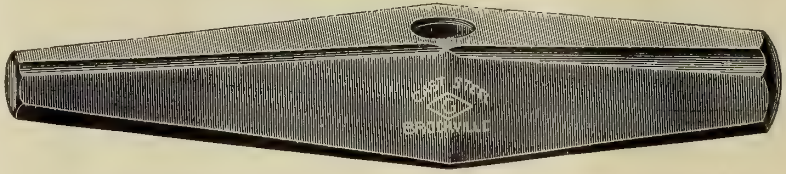

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TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Board of Railway Commissioners.—The appointment of J. P. Mabee, heretofore a Justice of the High Court for Ontario, as Chief Commissioner, succeeding the late A. C. Killam, has been announced in the Canada Gazette.

Canadian Northern Quebec Ry.—F. M. Spaidal, General Superintendent, Canadian Northern Quebec Ry., has also been appointed General Superintendent Quebec and Lake St. John Ry. The Master Mechanic, storekeeper, roadmasters and other officers in the operating department, will report to him and be under his orders. Mr. Spaidal will take his instructions from and report to the General Manager, J. G. Scott.

G. Tombs, General Freight and Passenger Agent, C.N.Q.R., has also been appointed General Freight and Passenger Agent Q. & L. St. J.R., vice A. Hardy, assigned to other duties. Office, Montreal.

A. Hardy, heretofore General Freight and Passenger Agent, Quebec & Lake St. John Ry., has been appointed storekeeper, Q. & L. St. J. Ry., with headquarters at Quebec. A large portion of the C.N.Q.R. stores at Shawinigan Jct. will be moved to Quebec, where there will be a combined storehouse in charge of Mr. Hardy. R. M. Gauthier, storekeeper C.N.Q.R., will be moved from Shawinigan Jct. to Quebec to assist Mr. Hardy.

W. W. Johnston, heretofore Freight Claims Agent, and chief clerk traffic department, Quebec and Lake St. John Ry., has been appointed chief claims clerk, C.N.Q. Ry., and Q. & L. St. J. Ry. Office, Quebec.

The office of Purchasing Agent, Q. & L. St. J. Ry., Quebec, heretofore held by J. A. Nicoll, has been abolished, Mr. Nicoll leaving the service.

The office of Paymaster Q. & L. St. J.R., Quebec, heretofore held by R. Hunter, has been abolished, and Mr. Hunter has been appointed soliciting agent in Quebec city, succeeding J. J. Conway, who has been transferred to the General Freight and Passenger Agent's office, Montreal.

T. C. Hudson, Master Mechanic C.N.Q.R., will be removed from Shawinigan Falls to Quebec, and be in charge of mechanical matters on the C.N.Q.R. and the Q. & L. St. J. R. J. Clark, Master Mechanic Q. & L. St. J.R., Quebec, has left the service.

R. J. Monroe remains as roadmaster C.N.Q.R. at Joliette, and C. J. Carpenter remains as roadmaster Q. & L. St. J.R. at Hedleyville.

Canadian Pacific Ry.—C. Murphy, who acted as General Superintendent of the Lake Superior Division during F. P. Brady's absence on leave, has been appointed acting General Superintendent, Eastern Division, relieving H. P. Timmerman, granted leave of absence.

The position of Resident Engineer at Smith's Falls, Ont., having been abolished, — Jones has been transferred to Ottawa as Resident Engineer.

R. W. Bishop, heretofore Resident Engineer at Ottawa, has been transferred to Smith's Falls, Ont., as assistant engineer, district 2, Ontario Division, reporting to Resident Engineer McConnell, Montreal.

W. B. Cronk, heretofore Assistant Superintendent, district 2, Eastern Division, has been appointed Superintendent. Office, Smith's Falls, Ont.

O. Brushley has been appointed acting Trainmaster, Smith's Falls section, district 2, Eastern Division, vice T. Collins, transferred to construction department.

L. Mulkern, heretofore travelling freight agent, has been appointed chief clerk, office of General Freight Agent, Through Traffic office, Toronto, succeeding L. W. Doherty, who has entered the Inland Navigation Co.'s employ, at Hamilton, Ont.

A. O. Secord, heretofore canvassing freight agent, Toronto, has been appointed travelling freight agent, succeeding L. Mulkern, promoted.

J. Jolly, heretofore in the General Freight Agent's Office, Toronto, has been appointed canvassing freight agent, succeeding A. O. Secord, promoted.

R. Dawson, heretofore bridgeman at Moose Jaw, Sask., has been appointed Master of Bridges and Buildings, district 2, Central Division, vice A. H. Bears, transferred to Saskatoon, Sask. Office, Winnipeg.

T. R. Flett, heretofore Trainmaster district 5, Central Division, has been appointed Superintendent district 3, succeeding C. S. Maharg, transferred. Office, Brandon, Man.

C. S. Maharg, heretofore Superintendent district 3, Central Division, Brandon, Man., has been appointed Superintendent construction Edmonton line, with headquarters at Saskatoon, Sask.

A. A. Smith, heretofore conductor, running out of Medicine Hat, Alta., has been appointed Trainmaster district 1, Western Division, vice T. R. Flett, promoted. Office, Moose Jaw, Sask.

J. Archibald has been appointed locomotive foreman at Field, B.C., vice A. W. Clark, transferred to Eholt, B.C.

H. Ingram, locomotive foreman, has been transferred from Eholt to Nakusp, B.C.

In reference to the press report mentioned in April issue, to the effect that J. A. Fullerton, C.P.R. ship's husband at Vancouver, B.C., had been appointed to take charge of the company's trans-Pacific steamship business there, we are officially advised that no change has been made in his position.

B. M. Humble, heretofore Secretary of the Vancouver Club, has been appointed Manager Empress Hotel, Victoria, B.C., succeeding Stewart Gordon, resigned.

G. A. Clifford has been appointed city passenger agent at Cleveland, Ohio.

W. C. Clawson has been appointed city passenger agent at San Francisco, Cal., vice F. W. Baker.

H. S. Carmichael has been appointed General Passenger Agent for Great Britain and Europe. Office, 24 James Street, Liverpool.

H. G. Dring has been appointed Assistant General Passenger Agent for Great Britain and Europe. Office, 62 Charing Cross, London, S.W., Eng.

Central Vermont Ry.—C. E. Dewey, heretofore Assistant General Freight Agent, G.T.R., has been appointed General Freight Agent, C.V.R., succeeding R. L. Burnap, transferred to G.T.R. service at Chicago, Ill. Office St. Albans Vt.

Grand Trunk Pacific Ry.—M. M. Reynolds, Fifth Vice-President G.T.R., has also been appointed Third Vice-President, G.T. Pacific Ry., with headquarters at Montreal. He will have special supervision of the treasury and accounting departments, and general supervision of the financial matters of the corporations in which this company has a pecuniary interest.

J. E. Dalrymple, heretofore General Freight Agent, G.T.R., Montreal, has been appointed Assistant Freight Traffic Manager, G.T.P.R. Office, Winnipeg, Man.

C. Fraser, heretofore C.P.R. yardmaster, Kenora, Ont., is performing the duties of Trainmaster, G.T. Pacific Ry., at Saskatoon, Sask., but no circular of appointment had been issued up to April 21.

Grand Trunk Ry.—M. M. Reynolds has been appointed Fifth Vice-President, with headquarters at Montreal. He will have special supervision of the treasury and accounting departments, and general supervision of the financial matters of the corporations in which the G.T.R. Co. has a pecuniary interest. Heretofore the G.T.R. treasury and accounting departments have been nominally under the jurisdiction of W. Wainwright, Fourth Vice-President, but the officers of those departments have reported primarily to the Second Vice-President and General Manager's office, owing to Mr. Wainwright's frequent absence from headquarters on diplomatic and other missions.

C. A. Hayes, heretofore Assistant General Freight Agent, Chicago, Ill., has been appointed General Freight Agent, vice J. E. Dalrymple, who has entered the G.T. Pacific Ry. Co.'s service. Office, Montreal.

A. E. Rosevear, heretofore Freight Claims Agent, has been appointed Assistant General Freight Agent, succeeding C. E. Dewey, promoted to Central Vermont Ry. service. Office, Montreal.

E. Arnold, heretofore Freight Claims' Auditor, has been appointed Freight Claims Agent, succeeding A. E. Rosevear, promoted. He will have charge of loss and damage freight claims. Hereafter freight overcharge claims will be dealt with by the Freight Claims Auditor. Office, Montreal.

B. A. Neisser has been appointed Freight Claims Auditor, in charge of freight overcharge claims, succeeding A. E. Rosevear, promoted. Loss and damage freight claims will be dealt with by the Freight Claims Agent, as heretofore.

W. J. Moffatt, heretofore chief clerk in Toronto station ticket office, has been appointed chief clerk in the city ticket office, Yonge and King Sts., Toronto, succeeding W. Grundy, resigned.

R. L. Burnap, heretofore General Freight Agent, Central Vermont Ry., has been appointed Assistant General Freight Agent, G.T.R., at Chicago, Ill., succeeding C. A. Hayes, promoted.

I. W. Gautt, Division Freight Agent, G.T.R., Toledo, Ohio, is reported to have been appointed Manager, Lackawanna-Grand Trunk Line, with office at Chicago, Ill.

The following agents have been appointed: St. Lambert, Que., F. Crane; Montreal, (Pass.) R. J. Wood; Maitland, (Pass.), Ont., W. J. Wilson; Toronto Exchange, C. R. Farrow; Toronto Jct., Ont., Jno. Campbell; Welland, Ont., A. Harvey; Simcoe, L.L., Ont., C. L. Painter; Corinth, Ont., E. W. Bancroft; Dunnville, Ont., G.W. McVicar; Bright, Ont., J. W. Gray; Sebringville, Ont., M. J. Goetz; Simcoe, G.B. & L.E., Ont., C. L. Painter; Fergus, Ont., H. Ham; Alma, Ont., L. K. Fox; Allenford, Ont., W. J. Kyle; Lucknow, Ont., D. Alair; Wilno, Ont., H. W. Otto.

New Brunswick Ry. and Coal Co.—P. S. Archibald, General Manager, Elgin and Havelock Ry., Moncton, N.B., and J. R. Stone, St. John, N.B., have been appointed by the New Brunswick Government Commissioners for the operation of the N.B. Ry. and Coal Co., succeeding Senator King and G. A. McAvity, resigned.

Quebec & Lake St. John Ry.—See Canadian Northern Quebec Ry.

Temiscouata Ry.—F. X. Belanger, heretofore chief clerk, freight department, General Manager's office, has been appointed General Freight Agent. Office, Riviere du Loup, Que.

Temiskaming and Northern Ontario Ry.—J. Leslie has been appointed district roadmaster, with jurisdiction over the line from Englehart to North Bay. Headquarters, Englehart, Ont.

J. Drinkwater has been appointed district roadmaster, with jurisdiction over the line from Englehart to the end of the track. Headquarters, Englehart, Ont. He was formerly C.P.R. roadmaster at Winchester, Ont.

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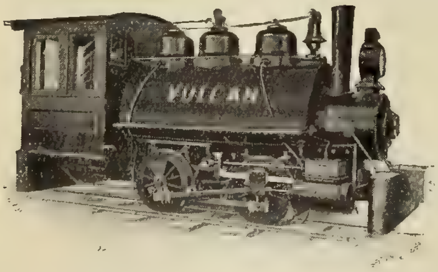

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ELECTRIC RAILWAYS.

Winnipeg Electric Railway Co.

The Street Railway Journal, New York, published the following in its issue of April 4:

"Arrangements were made Mar. 30 for the purchase by the city of Winnipeg of the entire holdings of the Winnipeg Electric Co., estimated to be worth in the neighborhood of $15,000,000. For some weeks negotiations have been in progress, but it was not until Mar. 30 that the company decided to dispose of the property, Winnipeg buying at the closing prices in Toronto on even date. The company also has a franchise for supplying gas. The street railway franchise was an exclusive one. The city already owns the waterworks, stone quarries and an asphalt plant. The Provincial Government owns the telephone system."

The above will certainly be "news" to the management of the W.E.R. Co. and its shareholders. Our esteemed contemporary has either accepted as true some daily press despatch, or has been imposed on. No such purchase has been made, and while the matter has been discussed in the city council, as mentioned in another column, even the negotiation stage has not been reached.

Projects, Construction and Betterments.

British Columbia Electric Ry.—An arrangement has been completed between J. C. M Buntzen, Managing Director, and the Chilliwack municipal council, for the immediate construction of an electric railway from New Westminster to Chilliwack. Construction will be undertaken in sections, and it is stated that the line will be ready for traffic in May, 1910. A site has been secured in Chilliwack for terminal purposes. (April, pg. 282).

A contract has been let to W. W. Forrester, New Westminster, B.C., for the extension to the company's car shops at New Westminster, for $20,000.

The grading on the Eburne-Westminster extension has been completed, and tracklaying operations are in progress.

Plans for the extension of the line from Cambie St., west along Cordova St., and south along Granville St., to Hastings St., have been submitted to the Vancouver Board of Works for approval. The work will be taken in hand immediately the plans are approved of.

J. C. M. Buntzen, Managing Director, announced recently that a syndicate had been formed by persons interested in the B.C.E.R Co., to take over the controlling interest of the Sumas Dyking and Development Co., and that a scheme for reclaiming lands in the South Fraser valley, through which the New Westminster-Chilliwack route will pass, will be prosecuted at a cost of about $700,000.

The construction of the line by the company, connecting the Esquimalt and Nanaimo Ry.'s Victoria terminus and the new freight sheds, has been commenced, and A. T. Goward, local manager, B.C.E.R., Victoria, stated recently, that a large gang of men would rush the work to a speedy conclusion.

Calgary St. Ry.—The city council is inviting tenders for the construction, equipment and operation of a street railway system in the city, for which it is prepared to grant a franchise for a limited period. (April, pg. 282).

It is reported that plans are under consideration for the construction of an electric railway from the city to Sheppard Lake, where it is proposed to lay out a pleasure park. Application is said to have been made for a franchise, with a view to the commencing of construction this year.

Central Ry. of Canada.—In reply to a question in the House of Commons recently, it was stated that the company made a deposit of $25,000 with the Government, which was still retained. Several claims had been sent in by engineers and others who had been engaged on surveys, but there was no way, at present, in which they could be dealt with by the Government paying claims against the company. The company was originally given an act, with the title of the Ottawa River Ry. Co., in 1903, with power to construct a large mileage of track in Quebec and Ontario to be operated by electricity, and in 1905 the name was changed. (May, 1906, pg. 275).

Dunnville, Wellandport and Beamsville Electric Ry.—The act passed by the Ontario Legislature recently granting an extension of time for the construction of this railway, declares the act of incorporation to be in full effect, except where it is amended by the present act, which provides for an extension from Dunnville to Port Dover, through Dunn, South Cayuga, Rainham, Walpole and Woodhouse. (April, pg. 283).

Edmonton St. Ry.—Proposals have been laid before the Edmonton City Council providing for the taking over, completing and operating of the street railway there. The railway, which is owned by the city, was originally outlined to consist of about 6½ miles of double-track, and actual construction was commenced June 15, 1907. A considerable portion of this has been laid and it was hoped to have construction completed by Sept., 1908. The city council was reported Nov., 1907, to intend making application for a franchise to operate in Strathcona, while the Strathcona Radial Tram Co., it was stated, had purchased a right-of-way into Edmonton, and had applied for permission to run on that city's streets. It is now stated that a plan is under consideration, whereby the interests of Edmonton and Strathcona will be handed over to a private syndicate, and the two railways completed and operated as a joint concern. (Nov., 1907, pg. 841).

Grand Valley Ry.—A considerable amount of work is to be undertaken by this company this year, and it is understood that a start will be made at an early date, on the following sections: The Brantford Street Railway will be reconstructed, and the line from Brantford to Galt relaid with 80-lb. rails, from which point an extension will be made; an extension will also be made to Port Dover, and another to Woodstock, connecting with the Woodstock, Thames Valley and Ingersoll Ry., the track of which is to be reconstructed. (Feb., pg. 121).

London St. Ry.—The question of an extension of the system to the north end of the city formed the topic of a conference between C. B. King, Manager L.S.R., and the city council committee, April 10. Two proposals were discussed, and the matter was left for the company to make a definite proposal for the route. The question of the use of the T rail versus the girder rail on Dundas St. was held over. (April, pg. 283)

Montreal and Southern Counties Ry.—Construction is in progress on the line to St. Lambert, and other points on the south shore. Considerable work has already been done at Black's bridge, along Mill St., and in strengthening the roadway over the canal sluiceways. The laying of the power cable, and the overhead work, was expected to be finished by the end of April, and it is hoped that cars will be running on the route by the end of June. (Dec., 1907, pg. 927).

Mount McKay and Kakabeka Falls Ry.—The total length of this line when completed will be 15 miles, and the route will be from Fort William along the Kaministikwia River, through the townships of Neebing, Paipoonge, and Oliver to Kakabeka Falls. About 2½ miles of track has already been constructed, part of which is within the Fort William boundaries. The company owns waterpowers, amounting to about 15,000 h.p., and a park of 13,000 acres along the proposed route. The officers and directors are: President, W. F. Hogarth, Vice-President, J. Dyke; Treasurer, C. H. Jackson; Secretary, C. W. Jarvis; and J. L. Davidson, Fort William. G. R. Duncan, Fort William, is the engineer. (April, pg. 283).

Nipissing Central Electric Ry.—Application is being made at the current session of the Dominion Parliament for an act extending the time within which the projected lines may be constructed. (April, pg. 283).

Ontario West Shore Electric Ry.—Tenders are reported to be under consideration for the construction of the section of this projected line between Goderich and Kincardine, Ont. A. Saunders, Goderich, Ont., who is interested in the company, stated in Toronto, April 18, that construction would be started at an early date, and is expected to be completed this season. The C.P.R. is reported to be interested in financing the undertaking, proposing to use it as a feeder to its recently constructed Guelph and Goderich Ry. J. W. Moyes, Toronto, has recently been engaged in the negotiation for construction. (April, pg. 283).

Ottawa, Brockville and St. Lawrence Ry.—This railway company, originally incorporated in 1900, for the purpose of constructing a railway from Ottawa to Brockville, Ont., and a ferry service on the St. Lawrence River between the latter city and Morristown, N.Y., was authorized to develop electric power and to use the same for the operation of its trains, but was prohibited from operating street railway lines in Ottawa and Hintonburg, Ont. A route was surveyed, and negotiations with the municipalities through which the line passed were carried on for some time, but the company has not yet reached the construction stage. The application at the current session of the Dominion Parliament for an act extending the time for construction for a further period of two years has resulted in considerable discussion both in the House of Commons and the Senate. The House of Commons inserted an amendment protecting the rights of municipalities operating lighting or power plants, and this amendment the Senate struck out. The House of Commons has reinserted its amendment.

In connection with the revival of this project a press report states that plans have been prepared for an electric railway from Ottawa to Morrisburg, Ont., passing through Carleton, Russell and Dundas counties; thence along the river front to Brockville, Iroquois, Cardinal and Prescott; thence northerly through Leeds, Lyn and Athens, Perth, Lanark and Renfrew, back to Ottawa, a circuit of about 200 miles. There are charters in existence covering several portions of the route named. (Mar., pg. 183).

Ottawa Electric Ry.—The extension of the line along Preston St. is proceeding, the rails, which were ordered in the fall, are now being delivered. A loop is being constructed at George St., a spur line on Lyn St., and the St. Patrick St. and New Edinburgh bridges are being strengthened. In view of these works, which are already well in hand, it is unlikely that other extensions which the city council is desirous of urging will be undertaken this year. The company's proposal to erect a car barn extending from Sparks St. through to Queen St., with a spur line on which to shunt cars

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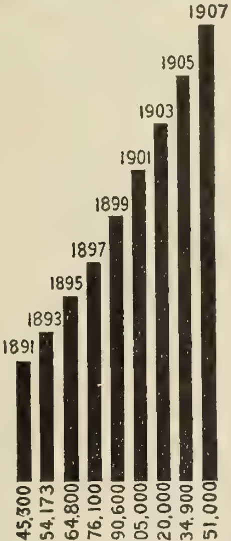

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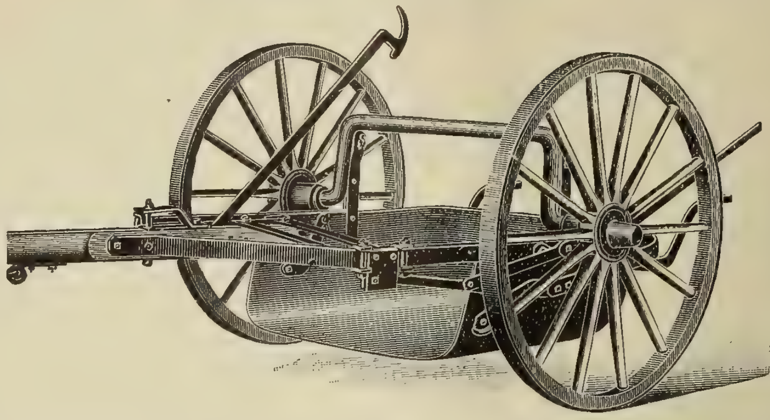

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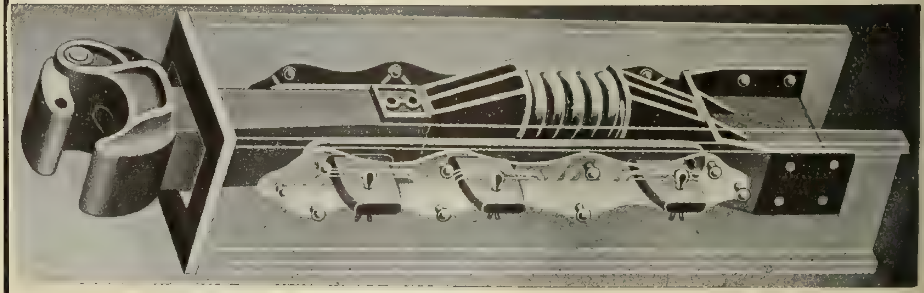

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between the proposed barn and the Albert St. barn, is meeting with considerable opposition, on the alleged grounds that property in the vicinity will be deteriorated, and that it is not a work for the convenience of the public.

St. John, N.B., Ry.—It is said that a line will be constructed this year from the city to Westfield, 3½ miles, in order to feed the amusement park which is to be opened there.

Toronto Ry.—At the recent session of the Ontario Legislature the following section affecting the relations of the Toronto City Council and the Toronto Ry. was inserted in the omnibus act, applied for by the city council: "Notwithstanding anything contained in the act passed in the 55th year of the reign of Her late Majesty, Queen Victoria, and chap. 99, and intituled 'An Act to incorporate the Toronto Ry. Co.,' and to confirm the agreement between the corporation of the City of Toronto and G. W Kiely, W. Mackenzie, H. A. Everett, and C. C. Woodworth; and notwithstanding any judicial decision interpreting the effect of the said act and the said agreement, it is hereby declared that it is and always has been the true intent and meaning of said act that the rights retained by and secured to the corporation of the City of Toronto by the said agreement as to the control and management of the streets of the said city, and as to establishing and laying of the said city as may be from time to time recommended by the city engineer and approved by the city council have not been and are not affected by the said act, but said rights remain and are as set out in the said agreement scheduled to the said act."

Toronto Suburban Ry.—Surveys are being made for an extension of the company's line from Fairview Ave. to Swansea. Officers of the company state that it has not been decided whether this route or one previously surveyed from Keele St. will be adopted. (Sept., 1907, pg. 683).

Toronto-Toronto Island.—An estimate has been prepared by the Toronto City Engineer for the construction of a tunnel under the western gap, to the Island, suitable for street car traffic. The estimated cost is $626,000, of which the tunnel proper would cost $150,000. The proposal is that the Dominion Government pay the cost of the tunnel and the city the cost of completion and approaches. The matter is being discussed with J G. Sing, Dominion Government engineer at Toronto.

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Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Gross earnings for Feb., $163,961; operating expenses, $84,670; net operating earnings, $79,291; renewal funds, $10,750; net earnings, $68,541; income from investments, $11,036; net income, $79,577; against $120,555, gross earnings; $60,940, operating expenses; $59,615, net operating earnings; $9,325, renewal funds; $50,290, net earnings; $9,536, income from investments; $59,826, net income for Feb., 1907. Aggregate gross earnings for 8 months ended Feb. 29, $1,331,921; net earnings, $662,619; against $953,550 gross and $476,532 net for same period 1906-07:

Halifax Electric Tramway Co.—Receipts for March, $12,718.27, against $12,543.83 for March, 1907. Receipts for 3 months ended March 31, $37,910.73, against $35,843.67 for same period 1907.

Montreal St. Ry.—A dividend of 2½% for the first quarter of 1908 has been declared, payable May 1.

Passenger earnings for March, $282,776.38; miscellaneous, $5,897.69; total, $288,674.07; operating expenses, $202,389.80; net earnings, $86,284.27; city percentage on earnings, $19,794.64; interest on bonds and loans, $17,879.57; contingent for renewals, $14,138.82; rent leased lines, $444.43; surplus, $34,026.61; against, $267,493.41, passenger earnings; $4,184.66, miscellaneous; $271,588.07, total earnings; $185,461.28, operating expenses; $86,128.79, net earnings; $16,476.72, city percentage on earnings; $13,024.79, interest on bonds and loans; $13,370.17, contingent for renewals; $339.96, rent leased lines; $42,916.15, surplus for March, 1907. Total passenger earnings for six months ended March 31, $1,720,570.97; miscellaneous, $26,565.91; total, $1,747,136.88; operating expenses, $1,145,865.73; net earnings, $601,271.15; city percentage on earnings, $81,455.99; interest on bonds and loans, $102,444.19; contingent for renewals, $86,028.69; rent leased lines, $2,353.14; surplus, $328,989.14; against $1,568,204.88, passenger earnings; $30,843.57, miscellaneous; $1,599,048.45, total earnings; $1,073,656.96, operating expenses; $525,391.49, net earnings; $69,788.36, city percentage on earnings; $88,326.99, interest on bonds and loans; $79,743.19, contingent for renewals; $1,019.88, rent leased lines; $286,513.07, surplus for same period 1906-07.

Ontario West Shore Electric Ry.—At a recently held meeting the following officers were elected: President, J. W. Moyes, C.E., Toronto; Vice-President, S. C. Smoke, Toronto; Secretary, H. J. A. McEwan, Goderich, Ont. A further meeting was held in Toronto, April 7, to give authority to the directors to issue bonds, debentures or other securities to the extent of $15,000 a mile of single track, securing same by mortgage deeds, and to enter into contract or contracts for the construction and equipment of the line from Goderich to Kincardine.

Sydney and Glace Bay Ry.—The company has appealed against the recent assessment of a portion of its property by the Glace Bay council, on the ground that the assessment is not legal, inasmuch as the company paid to the council a lump sum in lieu of all taxes. The council contends that the contract only exempted the property in existence at the time it was made, and that betterments and additions, such as the new power station, which is the assessed property in dispute, must pay taxes in the ordinary way.

Toronto Ry.—Car earnings for March, $272,407.80, against $264,304.42 for March, 1907. Total earnings for 3 months ended Mar. 31, $802,567.59, against $752,977.46 for same period 1907.

Winnipeg Electric Ry.—At a recent meeting of the city council, a motion was made to appoint a special committee to enter into negotiations with the Winnipeg Electric Ry. Co. for the acquisition of its whole business and undertakings, and for such purpose to have full powers and authority to employ such persons as may be required in order to ascertain the value, condition and capacity of the business and undertakings. It was stated that the directors of the company had been interviewed, and had said they were prepared to negotiate. After considerable discussion, it was decided to allow the motion to stand as a notice of motion. The company's assets at Dec. 31, 1907, were valued at over $13,000,000, and there is a capital stock of nearly 5½ millions, and a bonded indebtedness of $5,400,000. The surplus on hand at that period was $806,310.63. The company in addition to the street railway, supplies power and light, both electric and gas. The city has expended over $300,000 on its power plant, and large contracts are now in progress. While outside comment is not altogether advisable, it is surmised that the present is not an opportune time to discuss such a proposal in view of the general condition of the city's finances.

Electric Railway Notes.

H. C. Osborne, Toronto, has been elected Vice-President of the Chicago and Milwaukee Electric Ry. Co., Chicago, Ill., vice G. Ramsay, resigned.

The name of the Toronto and Mimico Ry. Co., Ltd., has been changed to the Toronto Power Co., Ltd., by order of the Lieutenant-Governor of Ontario in Council.

The Ontario Railway and Municipal Board has approved with certain amendments the rules of the Brantford St. Ry. Co. and the Woodstock, Thames Valley and Ingersoll Ry. Co.

J. J. Forbes, formerly G.T.R. station agent at Brantford, Ont., has been appointed freight agent, Galt, Preston and Hespeler St. Ry. at Berlin, Ont., J. McTavish having resigned to go into business for himself.

The Winnipeg Electric Ry. Co.'s employes, on the recent expiry of their agreement with the company, demanded among other things an eight hour day without reduction of pay, seats for motormen, and an appropriation for overcoats. Several meetings were held to discuss details, and threats of a strike, and an appeal to a board of arbitration were made, but it is anticipated that any trouble will be avoided.

The finance committee of the Montreal City Council decided April 10 to report to the council regarding the dispute with the Montreal St. Ry., as to the amount alleged to be due by the company as its share of the snow clearing cost, and asking that the city attorney be instructed to demand immediate payment. It was stated that $30,000 had been paid, and that another $25,000 was claimed to be due.

Replying to a delegation of street railway employes at Vancouver, April 7, J. C. M. Buntzen, Managing Director, B.C. Electric Ry., stated that he was still in favor of the pension scheme originated by him when he was General Manager, and although the Vancouver employes voted for it before, the Victoria and New Westminster employes were opposed to it, and until they were unanimous nothing could be done.

The Montreal Board of Trade recently adopted a resolution, to the effect that it advocates to the city council that an arrangement be made with the Montreal St. Ry. whereby with proper restrictions and safeguards for the rights and interests of the city, the company should be permitted to carry freight throughout the city, the city council reserving the right to approve of the streets on which such freight is to be carried.

The Berlin and Bridgeport Electric St. Ry. Co.'s appeal against the recent decision in a case brought by D. Forman, by which he was awarded $3,500 as damages, has been dismissed. Contributory negligence due to carelessness and unnecessary excitement, was alleged against the plaintiff in the original case, but a farmers' jury rendered a verdict in his favor; against which the company appealed, claiming that the verdict was not in accordance with the evidence.

In the act to amend the Municipal Act passed at the recent session of the Manitoba Legislature a clause was inserted regulating the method of voting upon by-laws affecting the operation of street cars on Sundays, and providing "in case such by-law is carried and a Sunday street car service is established thereafter, the said municipality shall provide and maintain such police supervision and protection as the Lieutenant-Governor-in-Council may from time to time require."

The Southwestern Traction Co. is adding six new interurban cars to its rolling stock; they are double ended; length, 50 ft. over all, 38 ft. bodies, and 8½ ft. wide over sheathing The bottom framing is combination steel and wood, the side walls solid blocked with W bracing, vestibule platforms, having a drop of 8 inches with double steps and automatic folding doors; the side windows are Pullman style with gothic top sash, and the exterior is painted Pullman color trimmed with gold; the interior is finished in cherry with painted head linings, the lighting being arranged in 6 circuits of 5 lights each; the seats are spring upholstered, in rattan, walkover style, with bronze handles on the aisle end of each seat back; each car is equipped with two 75 h.p. 500 volt railway motors, with the necessary controllers, and with the Westinghouse straight air brake equipment with the emergency feature, the use of which, it is claimed, renders the operation of trailer cars safe. The coaches are being built by the Preston Car and Coach Co., Preston, Ont., and the equipment by the Canadian Westinghouse Co., Hamilton, who have previously equipped similar cars for the same company.

Grain Elevator Notes.

The Imperial Elevator Co.'s elevator at Rosenfeld, Man., was destroyed by fire recently.

The North Star Grain Co.'s elevator at Milestone, Sask., with a capacity of 25,000 bush., is practically complete.

The Canadian Northern Ry.'s elevator at Eden, Man., containing 7,000 bush. of wheat, was destroyed by fire April 14.

G. Crow's elevator at Prairie siding, Chatham, N.B., with about 2,500 bush. of grain, was destroyed by fire April 18.

A press report states that the G.T. Pacific Ry. will erect an elevator at Mission River, Ont., with a capacity of 10,000,000 bushels.

The Imperial elevator at the C.P.R. station, Mowbray, Man., together with its contents, 3,000 bush. of wheat, was destroyed by fire, April 18.

The Macleod Farmers' Elevator and Mill, Ltd., has been incorporated under the Northwest Territories Ordinance respecting Companies, with office at Macleod, Alta.

The Fourth Vice-President of the C.P.R. stated recently that, on March 31, there were only 58 carloads of grain in the elevators at Fort William, Ont., to load for export and local consumption.

The G.T.R. elevator at Toronto was destroyed by fire April 21. The damage is estimated at $60,000. The elevator was constructed by the Northern Ry. in 1868, and had a capacity of 260,000 bush.

The Price Elevator Co., which was negotiating with the London City Council for land at Port Stanley, Ont., on which to construct an elevator, has not been able to come to terms, and it is expected that another site will be secured.

The Maple Leaf Flour Mills Co., Ltd., has let a contract to G. H. Archibald & Co., for the construction of a flour mill and elevator at Kenora, Ont., to take the place of the one destroyed by fire. It is expected that the buildings will be completed by Oct.

The Goderich Elevator and Transit Co. contemplates an annex to its 500,000 bush. elevator at Goderich, Ont. It is not expected, however, that the work will be gone on with this year, although materials for the construction may be prepared and delivered.

The Port Colborne, Ont., elevator which will have a capacity of 800,000 bush., is almost completed. It is anticipated that it will be used for transhipment purposes, the larger vessels being utilized solely for the lake traffic, and smaller vessels taking the grain through the Welland Canal and down Lake Ontario.

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The McGregor Banwell Fence Co. LIMITED
WALKERVILLE, ONTARIO

TORONTO BOLT AND FORGING CO. LIMITED
Manufacturers of
BOLTS AND NUTS
OF ALL KINDS, INCLUDING
Track Bolts
Track Spikes
Lag Screws
Boiler and
Bridge Rivets
TORONTO CANADA

J. Kennedy, Vice-President of the Grain Growers' Grain Co., at a public meeting at Killarney, Man., recently, contended that nothing but a system of government owned elevators, operated by an independent commission, could take the place of the present system and remedy the alleged existing evils of the grain trade.

The Western Grain Growers' Association recently sent a deputation to Ottawa to confer with the Ministers of Trade and Commerce, Agriculture and the Interior, on the proposals contained in the Grain Commission's report, and made strong representations in favor of the Dominion Government taking over the control of all terminal elevators at the head of the lakes.

The Great West Grain Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $50,000 and office at Brandon, with power, amongst other things, to build, operate, purchase and dispose of elevators, etc., and to carry on a general elevator and storage business. The provisional directors are: J. H. R. Gillespie, C. H. Lamontagne, C. M. Lamontagne, J. R. Brodie, M. A. Brodie, Brandon, Man.

MARINE DEPARTMENT

Coast, Lake and River Officers for 1908.

The following appointments have been made by navigation companies engaged on the coast, lake and river routes for their various vessels during the current year, in addition to those published in our April issue. In the first column is given the name of the vessel, in the second, that of the captain, and in the third, that of the chief engineer:

BRAS D'OR STEAMBOAT CO., NORTH SYDNEY, N.S.

Marion	L. A. Moore	W. R. Coleman
Weymouth	R. E. Burke	J. Macdonald

BROCKVILLE NAVIGATION CO., BROCKVILLE, ONT.

Brockville	S. Scott	W. J. Jento
Victoria	F. Andress	

C.P.R. BRITISH COLUMBIA LAKE AND RIVER SERVICE, NELSON, B.C.

Aberdeen	J. Weeks	W. Jacobs
Columbia	W. Kirby	J. Johnson
Kokanee	G. Robertson	W. Nuhl
Kootenay	L. H. Fraser	T. McKechnie
Kuskanook	W. Seaman	J. Cameron
Minto	J. Dougal	J. Russel
Moyie	L. McKinnon	D. Pollack
Nelson	M. Reid	J. Walker
Okanagan	G. L. Estabrooks	Y. Tray
Proctor	J. Fitzsimmons	T. Harris
Rossland	A. Forsland	J. Fyfe
Sandon	G. Graham	G. Stewart
Slocan	A. McLennan	H. Colbeck
Valhalla	O. Alfsino	D. Biggam
Ymir	F. L. Orr	W. Anderson
York	J. Ferguson	S. Peterson

COLLINGWOOD SHIPPING CO., COLLINGWOOD, ONT.

Wasaga	M. McKay	J. Myler

DESERONTO NAVIGATION CO., DESERONTO, ONT.

Ella Ross	D. B. Ainstie	M. J. McFaul
Ranger	A. Barnhart	G. Toppings
Rescue	T. J. Lynch	O. Flood
Where Now	W. J. Daly	W. H. Way

DOMINION TRANSPORTATION CO., OWEN SOUND, ONT.

Caribou	A. A. Balten	R. Grierson
Manitou	N. McCoy	W. McLaren
Telegram	G. Waugh	J. McLaren

GLOUCESTER NAVIGATION CO., LTD., SHIPPEGAN, N.B.

Beaver	J. B. Godin	E. H. Haviland

GRAND TRUNK MILWAUKEE CAR FERRY CO., MILWAUKEE, WIS.

Grand Haven	C. Lyman	E. F. Scott

HUNTSVILLE, LAKE OF BAYS AND LAKE SIMCOE NAVIGATION CO., HUNTSVILLE, ONT.

Algonquin	W. Sangelin	E. Goldthorp
Empress Victoria	A. Burke	J. O. Noys
Iroquois	J. St. Armon	J. Smith
Joe	R. Rowlandson	B. McGregor
Mohawk	R. Parsons	R. McCaw
Ramona	F. Brown	J. Logan

KILKEEL CO., LTD., TORONTO.

Kilkeel	J. T. Elsworthy	A. L. Stevenson

LEHIGH PORTLAND CEMENT CO., LTD., BELLEVILLE, ONT.

Salaberry	H. Hart	

LEMCKE TUG CO., LION'S HEAD, ONT.

W. E. Gladstone	E. B. Rumley	J. Skein

MAGDALEN ISLANDS STEAMSHIP CO., HALIFAX, N.S.

Amelia	R. D. Burns	H. Webster

MIRAMICHI STEAM NAVIGATION CO., LTD., CHATHAM, N.B.

Alexandra	J. Nowlan	S. G. Harding
Miramichi	J. P. Bullick	C Johnston
Sybella H.	D. S. Betts	A. McIntyre

MONTREAL TRANSPORTATION CO., LTD., MONTREAL QUE.

Advance	M. Olsen	R. Hepburn
Bothnia	A. Monpetit	T. Hazlett
D. G. Thomson	T. J. Murphy	L. E. Spancer
Emerson	C. Martin	G. Henderson
Fairmount	P. C. Telfer	J. W. Taylor
Glenmount	J. Wood	T. G. Bishop
Glide	T. O'Connor	G. M. Gerow
Hamilton (bge.)	G. Davy	
H. F. Bronson	L. Mallan	G. Dennison
Mary	J. B. Desgrosillier	C. A. Stilson
Mary P. Hall	W. J. Murphy	J. Kennedy
Quebec (bge.)	C. Sauve	
Rosemount	C. Milligan	R. Taylor
Stirling	J. Murray	G. Fleming
Stormount	H. N. McMaster	H. McClymount
Ungava (bge.)	J. Kirkwood	
Westmount	A. Milligan	W. Newbold
Windsor	J. Doyle	W. Spencer

RENWICK CO., LTD., TORONTO.

Renwick	J. Chapman	J. Hunter

J. RICHARDSON & SONS, KINGSTON, ONT.

City of New York	D. Rooney	
Ford River	C Daryaw	
Glengarry	C. Robineau	A. Legendre
J. B. Kitchen	J. Bongard	
Navajo	J. Corkey	L. Whalen

ST. LAWRENCE CANADIAN NAVIGATION CO., MONTREAL.

Imperial	J. Jean	A. Lacombe
Prefontaine	L. St. Louis	A. Blanchette
White Star	H. Langlois	C. F. Marchand

SARNIA TRANSPORTATION CO., SARNIA, ONT.

Cyrenian (bge.)	M. Mahony	
Lake Michigan	A. McLellan	H. Meyers
Naiad (bge.)	M. McDonald	

TURBINE STEAMSHIP CO., TORONTO.

Turbinia	—. Bongard	J. Pringle

TURRET CROWN, LTD., TORONTO.

Turret Crown	J. U. Foote	R. McLaren

UPPER ONTARIO STEAMBOAT CO., NEW LISKEARD, ONT.

Aileen	—. Donnelly	—. Kennedy
Blanche	F. S. Brickenden	S. Arbin
Britannia	F. Vincent	F.H.Brickenden
Geisha	—. Milligan	—. Johnston
Gipsy	—. Cartwright	—. McLaren
Lena May	—. Wright	—. Stevens
Myrtle	—. Cook	—. Donaldson
St. Antoine	—. Casselman	—. Lewis
S. & Y.	—. Pierce	—. Seoul
Wenona	—. Milligan	

VICTORIA STEAMSHIP CO., BADDECK, N.S.

Blue Hill	D. MacRae	J. Blesdale

W. J. WILLOUGHBY, WINDSOR, ONT.

Iron Age	W. J. Willoughby	R. Baxter

The Inland Navigation Co., Ltd.

This company, which has been incorporated under the Dominion Companies Act, with a capital of $2,000,000, and offices at Hamilton, comprises the following companies and steamboats, previously under the management of R. O. and A. B. Mackay of that city; Dundee Steamship Co., Ltd., S. S. Dundee; Dunelm, Ltd., S. S. Dunelm; Hamilton and Fort William Navigation Co., Ltd., S.S. Donnacona and Strathcona and Stadacona (under construction); Hamilton and Montreal Navigation Co., Ltd., S.S. Dundurn; New Ontario Steamship Co., Ltd., S.S. Neepawah and Wahcondah; Rosedale,

THE NORTHERN NAVIGATION CO.
GRAND TRUNK RAILWAY LINE
"A FRESH WATER SEA VOYAGE"
1,500 MILES UP THE GREAT LAKES
Frequent Sailings from Sarnia for Soo, Port Arthur, Fort William and Duluth
"THAT GEORGIAN BAY TRIP"
Sailings from Collingwood and Owen Sound for Manitoulin Island Points and Sault Ste. Marie
Also from Collingwood for Parry Sound, Byng Inlet and French River
Tickets from all Agents, or address C. H. NICHOLSON, Traffic Manager, Sarnia

Ltd., S.S. Rosedale; Union Steamship Co., Ltd., S.S. Glenellah; together with the wharfinger, cartage, warehousing and coal business of R. O. and A. B. Mackay at Hamilton, shed and wharf privileges at Montreal, and the business and property of the New Ontario Dock and Coal Co., Ltd., Sault Ste. Marie, Ont.

Following are the officers and directors of the company: President, W. Southam; Vice-President, R. O. Mackay; Directors, G. L. Staunton, W. G. Walton, J. P. Steedman, F. H. Whitton, J. Milne, J. W. Nesbitt, G. Hope, C. W. Band; General Manager, A. B. Mackay; Secretary, F. A. Magee. On assuming the position of Vice-President, R. O. Mackay retires from active participation in the management, and L. W. Doherty, formerly of the C.P.R. General Freight Agent's Office, Toronto, has been appointed assistant to the General Manager.

NORTHERN NAVIGATION COMPANY OF ONTARIO, LIMITED.

NOTICE is hereby given that at a meeting of the Board of Directors held to-day, it was decided to issue $160,000 New Stock, making, with the $840,000 now existing, the total Capital $1,000,000.

Subscribers on record 30th May, 1908, will be invited to subscribe, at par, for one share for every five shares of their then holding, payable 20 per cent. each of following dates: 2nd July, 1st August, 1st September, 1st October and 2nd November, 1908.

H. H. GILDERSLEEVE, Manager.

Toronto, 23rd April, 1908.

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NOTICE.

NIAGARA RIVER BRIDGE COMPANY.

The Annual General Meeting of the Niagara River Bridge Company, for the election of Directors and other general purposes, will be held on Wednesday, the 3rd of June, 1908, at the hour of eleven o'clock in the forenoon, at the offices of the Canada Southern Railway Company, in the City of St. Thomas.

NICOL KINGSMILL,
Secretary, N.R.B. Co.

April, 24th, 1908.

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NOTICE.

NIAGARA GRAND ISLAND BRIDGE COMPANY.

The Annual General Meeting of the Niagara Grand Island Bridge Company, for the election of Directors and other general purposes, will be held on Wednesday, the 3rd day of June, 1908, at the hour of eleven o'clock in the forenoon, at the Company's Head Office, in the City of St. Thomas.

NICOL KINGSMILL,
Secretary, N.G.I.B. Co.

April 24th, 1908.

◆

NOTICE.

CANADA SOUTHERN RAILWAY COMPANY.

The Annual General Meeting of the Shareholders of the Canada Southern Railway Company, for the election of Directors and other general purposes, will be held on Wednesday, the third day of June, 1908, at the hour of eleven o'clock in the forenoon, at the Head Office of the Company, in the City of St. Thomas.

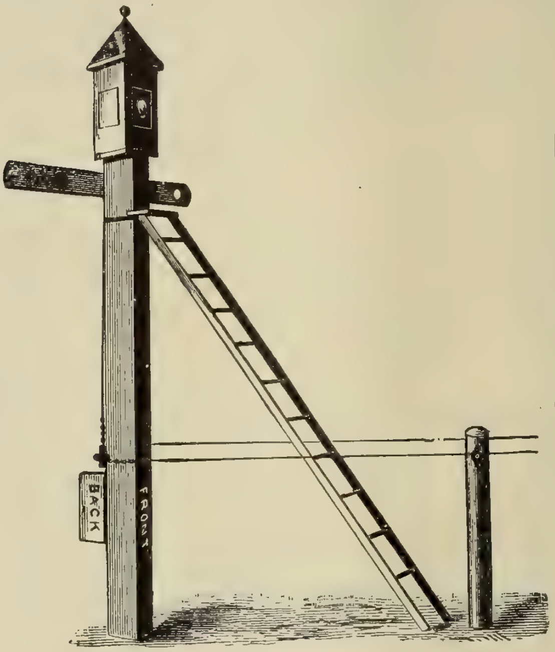
NICOL KINGSMILL,
Secretary, C.S. Ry. Co.,
St. Thomas, Ont.

Dated at St. Thomas, Ont.,
24th day of April, 1908.

THE N. L. PIPER RAILWAY SUPPLY Co.
LIMITED
314 Front St. West, Toronto

Manufacturers of Ship, Street and Railway Lamps, Etc.

Dealers in Chimneys, Burners, Wick, Fusees, Torpedoes, Etc.



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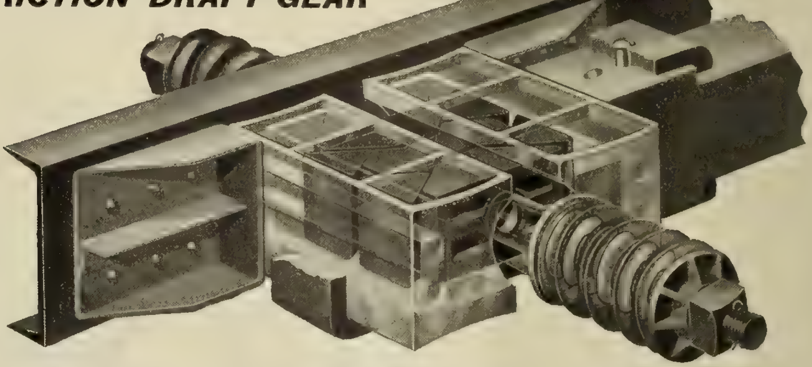
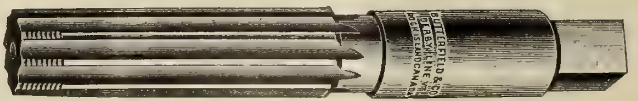
FRICTION DRAFT GEAR



Furnishes greatest protection to cars and locomotives.
CARDWELL MFG. COMPANY, CHICAGO, ILL.
Manufacturers of CARDWELL ROCKER SIDE BEARINGS.

REAMERS ALL KINDS OF REAMERS FOR RAILROAD SHOPS AND BRIDGE BUILDING



BUTTERFIELD & CO., ROCK ISLAND, QUE.
HAND, MACHINE AND TAPPER TAPS, STAY BOLT TAPS, BOILER AND PATCH BOLT TAPS. QUALITY UNSURPASSED.

LIST OF STEAM VESSELS REGISTERED IN CANADA FROM FEB. 1 TO MAR. 31, 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
Babine	122,548	Vancouver, B.C., 1908	Screw 5 N.H.P.	47.7	10.0	5.6	24	16	Vancouver, B.C.	C. A. Whitaker, Sechelt, B.C.
James Morgan	121,948	Hull, Que., 1906	" 4 "	52.0	11.6	4.8	21	8	Sorel, Que.	E. A. D. Morgan, Montreal.
M. E. Smith	122,389	Victoria, B.C., 1907	" 1 "	30.0	9.0	5.8	8	4	Victoria, B.C.	J. Christensen, Victoria, B.C.
Princess Ena	122,387	Garston, Eng., 1907	" 75 "	195.1	38.2	22.6	1368	827	" "	C.P. Ry. Co., Montreal.
Salmon King	122,196	N. Westminster, B.C., 1904	" 10 "	28.8	8.6	3.2	7	4	N. Westminster, B.C.	M. Monk and C. Christianson, New Westminster, B.C.
Sunburst	122,388	Victoria, B.C., 1908	" 4 "	61.0	15.8	7.0	42	19	Victoria, B.C.	Y. Kobori, Victoria, B.C.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA FROM FEB. 1 TO MAR. 31, 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross Tons	Reg. tons.	Port of Registry.	Owners.
*Athena	92,498	Newport, N.S., 1888	Bktn.	164.4	36.5	16.1	706	663	Windsor, N.S.	T. C. Thomson, Mobile, Ala., U.S.
Dredge Holland	125,974	Belle Ewart, Ont., 1906	Dred.	63.7	29.0	5.0	230	—	Toronto	G. Kastner, Wiarton, Ont.
Elfreda May	122,287	Shelburne, N.S., 1908	Schr.	79.0	22.8	9.1	87	78	Shelburne, N.S.	W. C. Patten, Grand Bank, Nfld.
Emily R.	121,817	Meteghan River, N.S., 1908	"	55.0	16.1	6.6	30	30	Digby, N.S.	E. J. Robichaud, Meteghan River, N.S.
F. E. Melanson	122,032	Gilbert's Cove, N.S., 1907	"	88.0	25.6	8.6	115	99	Weymouth, N.S.	D. J. Melanson, Gilbert's Cove, N.S.
Prince Guy	125,989	Montreal, 1903	Dred.	99.5	35.0	7.2	304	261	Montreal	W. J. Poupore, Montreal.
Prince Louis	125,970	" 1902	"	72.6	38.6	6.6	270	208	"	" "
Vie No. 2	122,549	Vancouver, B.C. 1908	Scow	57.3	18.3	2.5	54	54	Vancouver, B.C.	C. H. Cates, Vancouver, B.C.
*Wildwood	85,586	St. John, N.B., 1883	Barge	222.3	40.0	22.1	1492	1381	Windsor, N.S.	D. McG. Munroe, Windsor, N.S.

* Recovered wrecks.

Dominion Canals Regulations.

The regulations respecting the operations of canals, established by order-in-council, Mar. 17, were discussed at a meeting of the Dominion Marine Association's executive, April 14, and the Association's objections and request for interpretations of some of the obscure, or contradictory regulations, were heard at an interview with the Minister and Deputy Minister of Railways and Canals, April 16. At the outset, the deputation was informed that while the rules had been framed by the Superintendent of Canals, they had passed under the Deputy Minister's personal consideration, and having been approved and adopted they would remain operative and would not be suspended; and the deputation was advised that discussion should be aimed more at seeking explanations of any difficulties, which may be thought to exist, rather than at elaborating objections. The Deputy Minister also stated that the regulations need not be supposed to introduce anything new, as the revisison which had taken place consisted in the elimination of inconsistent and unnecessary provisions, and in remodelling, rather than making any material changes. Certain of the rules, he continued, may be thought to be strict, but the intention was to make the rules strict, and give the superintendents a great deal of power, in the expectation that these officers would use a wise discretion, and construe the rules broadly and fairly, so that no injustice would be done anyone. If any officer failed to give satisfaction or interpreted a rule so that it worked injustice, an appeal should at once be made to the Deputy Minister, and such an appeal would be promptly and fairly dealt with. The apparent strictness of the rules will bear with special force upon a defaulter, should any trouble arise, and in cases before the courts, where the clemency of the Department could not be invoked, hardship may be encountered.

The regulations were discussed seriatim, and in many cases, the errors and inconsistencies alleged by the Dominion Marine Association were clearly proved to exist, and it is unfortunate that before these regulations were promulgated, they were not submitted to the Association for suggestions, which would at any rate have saved vessel owners from being placed in an anomalous position, in regard to, at least, one of the rules which, it was practically admitted, would have to be broken to enable a steamboat to pass several vessels, moored near each other, or along a wharf. The apparent discrimination against Ontario canals, it was promised, would be further considered. The rule providing for the charging of wharfage on all cargoes going down the Lachine canal, or entering it westward, and extra charges on all goods allowed to remain over five days, and for every additional five days, was carefully discussed, and it was apparent that full consideration had not been given to the matter before the regulation was passed. The Deputy Minister stated that the intention had been simply to do away with the discrimination which existed between the Lachine canal docks and those subject to the Montreal Harbor Commissioners. It followed that no double charge was intended, nor would be made upon goods passing first over one dock, and later over another. It was urged that even if the imposition of a general tariff of charges was fair, those having Government leases should be exempt. Both the Minister and Deputy Minister concurred in this, and the Minister ruled, extending the provisions to cover all leases from the Government whether to vessel owners or to others, the vessel, in all such cases, enjoying exemption from the charges imposed by this rule. Regarding the Sunday opening of the canals, the deputation was informed that the practice followed last year would be continued.

The deputation consisted of, A. A. Wright, President; C. J. Smith, F. Plummer, L. L. Henderson, C. A. Jaques, J. H. Hall, C. P. Murphy, D. Noonan, —. Elliott and F. King, Secretary.

◆

Atlantic and Pacific Ocean Marine.

J. Mitchell, captain of the Donaldson Line S.S. Cassandra, was married in Glasgow, Scotland, recently.

A Board of Trade enquiry into the breakdown of the C.P.R. steamship Mount Royal, in December last, has been held in London, Eng.

The Hamburg-American S.S. Pretoria, having encountered rough weather, had to put in at Halifax, N.S., April 5, being short of coal.

The Pickford and Black Steamship Line has chartered the S.S. Wobun to take the place on the Bermuda route of the wrecked S.S. Beta.

The Allan Line S.S. Hesperian sailed from Great Britain, April 17, on her maiden trip. She is on the Montreal-Glasgow route, and at her trials maintained a 16½ knot speed.

The C.P.R. has chartered the steamships Glenfarg and Lennox for the trans-Pacific service, to take the places of the Athenian and Tartar, recently sold to a Japanese firm.

R. A. Alley, President of the R. A. Alley Steamship Lines running between British Columbia and New Zealand, died recently in New York, after an operation for appendicitis, aged 32.

The Manchester Liners' S.S. Manchester Shipper, which had a mishap recently, was temporarily repaired at St. John, N.B., and proceeded to New York, where complete repairs were made.

On the arrival of the Donaldson Line S.S. Cassandra at St. John, N.B., April 11, Capt. Mitchell was presented with a buffet in quartered oak, by a number of St. John friends, on the occasion of his recent marriage.

It is reported that the Imperial Government has renewed the mail subsidy to the C.P.R., for the Great Britain-Orient service, via Canada, on the understanding that closer connections be made between the Atlantic and Pacific oceans.

The Two Kwangs Chinese Steamship Co. is being organized for the purpose of eventually inaugurating a trans-Pacific service between Chinese and Canadian or U.S. ports. Shares are being offered, principally to Chinese in Canada, at $2.50.

The German steamship Statendam, communicating with the Marconi station at Sable Island, N.S., April 13, reported a French vessel named Breizhuel, in distress, with broken rudder, about 240 miles southeast of Halifax. Assistance was immediately sent from Halifax.

The U.S. Congress will shortly consider a bill providing that all sea-going vessels shall be equipped with a self-anchoring line, and a means of projecting a line to the shore, or other suitable point of vantage, so that in case of wreck, near shore, passengers and crews may, by the use of a breeches buoy, be landed, independent of help from shore.

Manchester Liners, Ltd., has purchased the British Steamship Co.'s S.S. Fulham, and renamed her Manchester Miller. She was built at West Hartlepool, Eng., in 1890, and is equipped with triple expansion engines, 165 n.h.p., with cylinders 21, 34 and 55 ins. diam. by 42 ins. stroke. Her dimensions are: length, 270 ft.; breadth, 36½ ft.; depth, 19 ft.; tonnage, 2,039 gross, 1,277 register.

The Dominion Government contract for a service between Canadian and French ports has been awarded to the Allan Steamship Line for ten years. A subsidy will be paid of $100,000 annually for 18 round trips, and the Government has been authorized to increase the subsidy payments for an increased service, should the traffic demands warrant it, the maximum being $200,000 for 36 round trips annually.

Consequent upon the death of Capt. McNicoll, of the Allan Line S.S. Victorian, Capt. Pickering, formerly of the Corsican, has been transferred to the Victorian; Capt. Outram of the Grampian, to the Corsican; Capt. Gambell of the Mongolian, to the Grampian; and Capt. Williams has been appointed to the Mongolian. Capt. Vipond of the Virginian succeeds Capt. McNicoll as commodore of the Allan fleet.

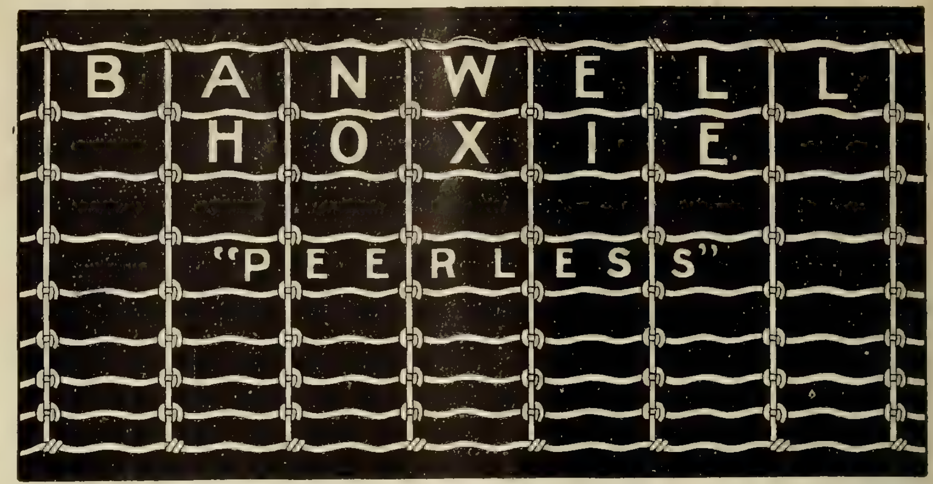
The various steamship companies running vessels between Canada, the U.S., and European ports have entered into an agreement for the reciprocal use of return tickets. The following companies are parties to the agreement, which has gone into effect: Allan, American, Atlantic Transport, C.P.R., Cunard, Dominion, French, Hamburg-American, Holland-American, Leyland, Norddeutscher Lloyd, Red Star, and White Star lines.

The C.P.R. and the Chargeurs Reunis have entered into an arrangement whereby the latter company will place three vessels on the Yokohama-Vancouver route, to be followed by another two vessels, when constructed. The service will be a "round-the-world" one, from Antwerp to the Orient, via the Suez Canal, thence to Vancouver, and returning to Antwerp round Cape Horn. Passengers and freight for Canada and the U.S., and for Europe by the Canadian route, will be handed over to the C.P.R. at Vancouver.

Press reports from London, Eng., state that at the opening of navigation in 1909, the White Star Steamship Line will inaugurate a service between Liverpool and Montreal, placing four 24-knot steamships on the route, capable of accommodating between 3,000 and 4,000 passengers in addition to first-class berths. J. Thom, Canadian manager of the Dominion Line, recently stated that this service would be conducted in conjunction with that of the Dominion Line, and Liverpool reports convey the impression that the G.T.R. and G.T. Pacific Ry. are connected with the proposal.

The Nautical Gazette, New York, of recent date, states that "Four new and thoroughly modern passenger steamers are now building in Scotland to the order of the Allans, which are intended for service on the Pacific, plying between Prince Rupert (the Western terminus of the new Canadian Transcontinental Railway), and the ports of Japan, China and the Philippines. The Allans, under their working arrangement with the G.T. Pacific Ry., will also give battle for the Canadian-Australian trade." We have been unable to obtain any confirmation of this, and are of the opinion that the statement has no foundation in fact.

The C.P.R. S.S. Mount Temple, which was wrecked on Ironbound Island, N.S., Nov. 30, was successfully floated April 15, and proceeded to Halifax under her own steam. The work, which was undertaken by the Halifax Salvage Association, consisting of S. M. Brookfield, Ltd.; G. S. Campbell & Co., and Beazley Bros., is of an interesting character, inasmuch as it is the first time the system has been adopted on the Atlantic coast for such salvage work. The vessel's holds were freed from water by means of compressed air, the holes closed and the whole made airtight. It has been stated that the Salvage Association will receive $200,000 from the underwriters for the work.



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Made from uniformly heavy hard steel wire, well galvanized.
Made in large rolls ready to stretch up.
Requires but few posts; costs very little to erect.
Conforms perfectly to any surface, no matter how rough
Reduces the cost of fence maintenance to a minimum.

BANWELL HOXIE WIRE FENCE COMPANY
HAMILTON, ONTARIO LIMITED

C.P.R. LANDS

THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00	to	$15.00	per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00	to	25.00	per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00			" "
Map No. 5—South-Western Alberta	8.00	to	15.00	per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00	to	25.00	per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00	to	25.00	per acre.

All prices are subject to change without notice.

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160 Acres at	$ 8.00	per acre, cash payment	$191.70	first year's interest	$65.28	and nine instalments of	$160.00
" "	9.00	" "	215.70	" " "	73.46	" "	180.00
" "	10.00	" "	239.70	" " "	81.62	" "	200.00
" "	11.00	" "	263.60	" " "	89.78	" "	220.00
" "	12.00	" "	287.60	" " "	97.96	" "	240.00
" "	13.00	" "	311.55	" " "	106.10	" "	260.00
" "	14.00	" "	335.60	" " "	114.32	" "	280.00
"	15.00	" "	359.50	" " "	122 44	" "	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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RE-BUILT AND SPECIAL CARS TO MEET ANY REQUIREMENTS

Maritime Provinces and Newfoundland.

J. Kenny, Kelly's Cove, N.S., has been appointed wharfinger of the Government wharf there.

C. Fisher, Fort Augustus, P.E.I., has been appointed wharfinger at Haggerty's wharf, East River, P.E.I.

The New Brunswick Public Works Department received tenders April 27 for the construction of a high water wharf at Queenstown.

The Newfoundland sealing steamer Grand Lake, with a cargo of seals, was crushed in the ice April 12, and immediately sank, all of the crew escaping.

A bill abolishing signal dues on vessels under 350 tons, entering Halifax harbor, has been introduced in the House of Commons by the Minister of Marine.

The Three Rivers Steamship Co., Georgetown, P.E.I., has sold its steamship Electra to Capt. Baillie, of Pictou, N.S., who has proceeded to Montague to take charge of her.

The Black Diamond Line steamships Bonavista and Cacouna have been extensively overhauled during the winter season, and each has been fitted with permanent cattle pens.

A report on the shipping casualties on the Canadian and New England coast, for the past winter season, shows that 350 lives were lost, 251 lives being accounted for by the wreck of 10 vessels of the French fishing fleet off St. Pierre.

Press reports state that the Imperial Government is about to resume occupation of the Halifax dockyard, and that a number of men will shortly be transported from the Chatham, Portsmouth and Devonport dockyards, Eng., to commence operations there.

The schooner Beatrice Mack was run down recently in a snowstorm by the Allan line S.S. Victorian, and subsequently reached Lunenburg, N.S., in a sinking condition. Those in charge of the Victorian were unaware of the accident and proceeded to Halifax.

The Italian barque Affezione was recently sold by order of the Admiralty Court. The purchasers, Lewis & Son, Sheet Harbor, N.S., will have the vessel repaired, her name changed, and place her on the route between N. S. and United States ports. The price paid for her was $1,778.

The steamboat Arcadia, built in Yarmouth, N.S., in 1884, has been sold by her owner, Capt. Beattie, Pictou, N.S., to F. Magee, Port Elgin, for $3,000. She is a screw vessel, with engine of 30 h.p., her dimensions being: length, 68 ft.; breadth, 16.7 ft.; depth, 6.4 ft.; tonnage, 62 gross, 42 register.

Hon. J. Lovitt, who died at Yarmouth, N.S., April 13, aged 75, was connected with navigation matters from his early years, retiring from active sea life in 1869, to engage in the shipbuilding business in partnership with his brother, as Lovitt & Co., at Saulnierville and Churchpoint, N.S.

Capt. Chas. Dave, a large shipowner of Newfoundland, and leader of the opposition in the House of Assembly, died at St. John's, Nfld., Mar. 30. He was born Feb. 28, 1845, and has been more or less connected with the sealing industry all his life. He was Minister of Fisheries from 1897 to 1900.

The St. John, N.B., schooner Helen E. Kenney was recently reported ashore at Curacoa, and that there was no hope of saving her. She was built at Black River, N.B., in 1891, her dimensions being: length, 126.8 ft.; breadth, 30.2 ft.; depth, 11.5 ft.; tonnage, 294; owned by J. A. Sinclair and Co., St. John, N.B.

The officers and directors of the Gloucester Navigation Co., Ltd., of Shippegan, N.B., for the current year, are: President, A. J. Sormony, L'Ameque; Vice-President, F. X. Comeau, Caraquet; E. Chiasson, Little L'Ameque; P. Lue, Little Shippegan; J. J. Robichaud, Shippegan Island, and D. T. Robichaud, Bathurst.

The Dorchester Stone Works, which has been incorporated under the New Brunswick Companies Act, with a capital of $10,000, and office at Dorchester, is authorized to acquire and operate steam and other vessels in connection with its business. The provisional directors are: F. C. Palmer, W. H. Chapman, H. C. Palmer, C. L Hannington, Dorchester, N.B., and C. Cook, Parrsboro, N.S.

Tenders were recently received for a steamboat for the mail service between Wesleyville and Fogo, Nfld., the service to commence May 1, general conditions permitting The vessel is required to have a speed of not less than 8 knots an hour, with accommodation for 20 passengers, and is to make one round trip each week, connecting with the S.S. Dundee at Wesleyville each Tuesday and Saturday.

At a recent joint meeting of representatives of the Dartmouth, N.S., ferry commission, the city and county councils, a draft scheme was prepared, and will be submitted to the Provincial Government, providing for the joint control of the ferry by the city, county and Government, that the Government provide a subsidy of $5,000 a year, that the rate for passengers be not more than 2c., and that in case of a deficit, the city and county be assessed in proportion to the respective valuations.

The St. John, N.B., Pilot Commissioners have submitted for the approval of the Governor-General-in-Council, the rates for transporting vessels in the St. John harbor, as follows:

	200 tons and under	$ 2.00
From	200 tons and up to 400 tons	3.50
	400 " " 500 "	5.00
	500 " " 1,000 "	7.00
	1,000 " " 1,500 "	9.00
	1,500 " " 2,000 "	11.00
	2,000 " " 2,500 "	13.00
	2,500 " " 3,000 "	15.00
	3,000 " " 3,500 "	17.00
	3,500 " " 4,000 "	19.00
	4,000 " " 4,500 "	21.00
	4,500 " " 5,000 "	23.00
	5,000 " and over	25.00

Navigation on the St. John River, N.B., was opened April 16, by the Hampstead Steamship Co.'s steamboat Elaine and the Star Line Steamship Co.'s steamboat Majestic, on the St. John-Gagetown route. The latter company's steamboat Victoria has also been placed on the Fredericton route, making three round trips weekly. It is stated that the Dominion and Provincial governments are to be asked for subsidies for this route, and if granted, the Majestic will be withdrawn from the Gagetown route, and in conjunction with the Victoria will ply a daily service to Fredericton.

The original plans for the proposed extension of the Rodney wharf, at St. John, N.B., by the Public Works Department, have been abandoned, on the representations of the captains of the C.P.R. and Allan Steamship Lines, on the ground that with the extension there would not be sufficient space for two vessels to moor alongside unless the stern of one vessel projected into the stream, which is considered dangerous in view of the strong tides. A. St. Laurent, Assistant Chief Engineer, Public Works Department, visited St. John recently, and has recommended that new plans be prepared providing that the present wharf be extended 160 ft. straight out on the south side, and from the south corner, the outward face fronting the harbor be extended northwards at an outward angle of 45° for about 200 ft. From the north corner, the northerly face runs inward for about 900 ft., so that there will be provided berths on the north side for one large and one small vessel, and on the south side for one of the largest class of vessels.

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Province of Quebec Marine.

H. Sauvé, Coteau du Lac, Que., has been appointed Government wharfinger there.

The Montreal Transportation Co.'s steam tug Sterling, which is being built at Grangemouth, Scotland, was launched there recently. Details of this vessel were given in our Nov., 1907, issue.

The inscription to be placed on the monument in memory of the late Hon. J. Young reads: "Hon. John Young, 1811-1878, through whose foresight, public spirit, and energy, Montreal has become the national part of Canada."

The Lake Champlain and St. Lawrence Ship Canal Co. is applying to the Dominion Parliament, at its current session, for an act declaring its corporate powers to be in full force, and extending the time for the construction and completion of its canal.

The St. Maurice Lumber Co., Three Rivers, has deposited with the Public Works Department, plans for ten piers it proposes to construct in the St. Maurice River, on the east side, and has applied to the Governor-General-in-Council for approval of such construction.

The Quebec Steamship Co.'s annual meeting was held April 15. Following are the officers and directors for the current year: President, W. Price; Vice-President, J. T. Ross; other directors, A. Ahearn, G. D. Davie, J. G. Garneau, W. Simons, Hon. J. Sharples, Quebec; M. N. de Lisle, W. A. Murray, Montreal.

The Municipal Contracting Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $100,000, and offices at Montreal, to carry on a general contracting business, to erect and operate mills, elevators, warehouses, etc., and to build, purchase or otherwise acquire steam and other vessels, and to build wharves, etc., in connection with the operation of such vessels. The provisional directors are: V. Morin, A. H. Desloges, T. Sutton, O. Constantineau, and R. Gohier, jr., Montreal.

The St. Lawrence Canadian Navigation Co., Ltd., against which a winding-up order was made in Nov., 1907, has been reconstructed, and an arrangement made with its creditors, by which it is proposed to meet its liabilities during the current season. The company was incorporated under the Dominion Companies Act in 1906, with a capital of $1,000,000 and offices at Montreal. It did a considerable passenger and merchandise business, and owns the steamships Sovereign, Prefontaine and White Star; the first of which was lengthened by 25 ft., and rebuilt at Sorel, last year, and was subsequently held responsible in a collision with the Germaine. The officers and directors for the current year are: President, A. A. Bernard, Montreal; Vice-President, V. Lemieux, Quebec; other directors, J. A. Labrecque, Montreal; W. Paul, Jr., Sorel; J. I. Lavery and F. Nadeau, Quebec.

◆

The accidents among Canadian navigation employes, reported during Feb., are two deaths, neither of which was due to any accident in connection with his employment, and one non-fatal accident, due to being struck by a steering wheel.

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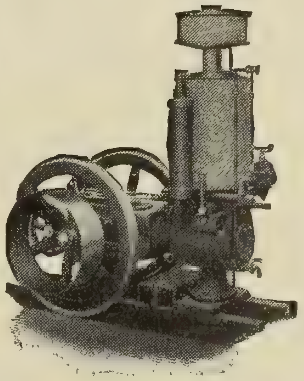

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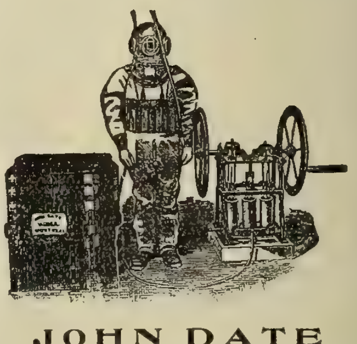

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Ontario and the Great Lakes.

The Point Edward ore docks are being lengthened by 150 ft.

The Thousand Islands Steamboat Co. will not run the S.S. Ottawa this season.

C. E. Begin, Byng Inlet, Ont., has been appointed harbormaster of that recently constituted port.

J. Harrison & Co., Owen Sound, have sold their barge Charlie Crawford to Pedwell & Lemcke, Lion's Head.

The Inland Navigation Co.'s S.S. Wahcondah passed through the Welland canal April 14, being the first of the season.

A. A. Bellerose has been appointed captain of the Northern Navigation Co.'s S.S. City of Toronto for the current season.

The names of the barges Black Diamond and E. P. Beals, of Ottawa, have been changed by order-in-council to Freeport and Cobalt respectively.

The contract for the construction of section 2 of the Holland River division of the Trent canal has been awarded to J. Riley, St. Catharines, Ont.

The steamboat Pierrepont opened navigation from Kingston, April 6, by a trip through the harbor ice, and subsequently proceeded to Cape Vincent.

Tenders for the construction of the extension of the Toronto island breakwater were received up to April 24, by J. G. Sing, Government Engineer, Toronto.

J. F. McEwen has been appointed chief engineer of the St. Lawrence River Steamboat Co.'s S.S. Pierrepont. The company has decided not to run the Jessie Bain this season.

W. Bermingham, contractor for the construction of the outside breakwater at Goderich harbor, is making arrangements for rushing the work, as soon as the weather allows.

Tenders are under consideration by the Marine Department for the removal of the wrecked schooner George G. Houghton, now lying near Bar Point lightship, Detroit River.

Hon. W. Pugsley, Minister of Public Works, stated in the House of Commons, April 14, that a proposal to dredge various lake harbors to a depth of 25 ft. was under consideration.

The Reid Wrecking Co., Sarnia, has sold the steam tug Own to F. Trotter, Amherstburg, and it is said that the vessel is to be used as a Government patrol boat at Limekiln crossing.

J. Glass, master of the Point Edward-Port Huron ferry boat, was charged April 17 at Port Huron, Mich., with smuggling foreigners into the U.S. The boat was seized and held at North Port Huron.

The Hamilton Steamboat Co.'s S.S. Macassa, which was launched at Glasgow, Scotland, 20 years ago, has, it is stated, only been out of service one day during the seasons she has been on Lake Ontario.

The Toronto Ferry Co.'s building on the Toronto wharf is expected to be completed before the end of May. It is double-decked, so that passengers may pass to both the upper and lower decks of the ferries at the same time.

The contract for the construction of a western entrance to Toronto harbor has been let to R. Weddell, Trenton, Ont., at $495,000, by the Public Works Department. The channel to be constructed will be 400 ft. wide.

The Canadian Pacific Car and Passenger Transfer Co.'s ice-breaking ferry steamer Charles Lyon was the first vessel to enter Kingston harbor this season. She put in there April 6, on her way to the ferry route between Prescott and Ogdensburg.

Haney & Miller's steam barge Reliance, which was raised towards the end of 1907, and allowed to sink again, now lies near the western entrance to Toronto harbor, and is considered a menace to navigation. Steps are being taken for its early removal.

The Richelieu and Ontario Navigation Co.'s steamboats Brockville and Rapids King have had their dining-rooms re-modelled, so that a dining-room service may be run similar to that on the company's other boats, in addition to a buffet service.

The Hamilton Steamboat Co.'s steamboat Macassa, which arrived at Toronto April 2, reported very rough weather in Burlington channel, and also that the lighthouse had fallen across the channel, rendering a course to the offing hazardous during a storm.

Brockville town council has made a grant of $200 a year for five years towards the maintenance of a proper ferry service between that town and Morristown, N.Y. The agreement will provide for six trips a day, the fare to be 25c. for the round trip.

The Dominion Marine Department received tenders April 28 for the construction of a lighthouse tender and buoy steamer for the Georgian Bay service, to be of the following dimensions: length over all, 194 ft.; breadth, moulded, 35 ft.; depth, moulded, 17.6 ft.

The Otonabee Navigation Co. has purchased the steamboats Empress and Monita from the Trent Valley Navigation Co., and the steamboat Monarch from Harris and McAllister, Gore's Landing, and purposes running a service from Bobcaygeon to Rice Lake this season.

Tenders were recently received for the purchase of the Richelieu and Ontario Navigation Co.'s S.S. Picton, which was considerably damaged by fire last season at Toronto. It is understood that none of the tenders was satisfactory, and that no sale has taken place.

The Mutual Steamship Co.'s new vessel, Acadian, sailed from England recently, with a full cargo, destined for Toronto and Fort William. The company, whose head office is at Port Colborne, has opened a branch office at the Board of Trade Bldg., Toronto, in charge of Capt. J. W. Norcross.

The J. H. Reynolds Construction Co., which has a contract on the National Transcontinental Ry., will, it is understood, inaugurate a steamboat service during the summer between Matheson and Iroquois Falls, 21 miles, and from below the falls to the crossing, a further 21 miles.

The Lake Erie Navigation Co.'s steamboat Marquette Bessemer No. 1 was drydocked recently to undergo repairs, as the result of a collision with Marquette Bessemer No. 2, due to the latter becoming fast in the ice, when breaking a channel for the former at the opening of navigation.

The tug W. E. Gladstone was the first vessel to arrive in Owen Sound this season, Capt. E. Rumley being awarded the customary Board of Trade hat. The tug was scuttled at the close of last season for protection during the winter, and was raised April 10, reaching port the following day.

Plans, estimates and reports have been submitted to the Public Works Department, with a request that it should undertake improvements to the main channel of the St. Lawrence river between Kingston and Brockville, via Thousand Islands. The expenditure will be in the neighborhood of $100,000.

Replying to a question the Minister of Finance recently said the dredge Sir Wilfrid was to be completed by June 1, the estimated cost being $90,000. This cost did not include a scow for which offers were asked from two Canadian firms, and a contract was given by order-in-council Mar. 9.

The Minister of Railways and Canals stated in the House of Commons recently that the cost of the Welland canal and improvements to Feb. 29, had been $31,825,856.36. No estimates had, he said, been obtained for the proposed enlargement of the locks, nor for the deepening of the canal to 21 ft.

Construction was recently commenced on section 2 of the Livingstone channel of the lower Detroit River. It is expected that the work will occupy at least three years, and cost nearly $2,000,000. The section commences at the Canada Southern Ry. bridge and extends to Stoney Island, about 8,000 ft.

The Ogilvie Flour Mills Co., Ltd., has been granted supplementary letters patent, increasing its capital stock to $4,500,000, and extending its powers to include amongst other things the owning and operating of all necessary equipment for the conduct of transportation by water in connection with its business.

A press report states that the C.P.R. contemplates the establishment of a daily passenger service between Fort William and Owen Sound, if not during the present season, then probably next year, and that the traffic offering is being watched closely with a view to ascertaining the possibilities of such service being remunerative.

The Niagara, St. Catharines and Toronto Navigation Co.'s steamboat Lakeside reached Toronto Mar. 30, and was the first arrival there this season, the captain, D. J. Enright, being awarded the customary silk hat. In warping alongside the wharf, a slight accident occurred, the vessel colliding with the wharf and damaging it to some extent.

R. O. Mackay, of R.O. and A.B. Mackay, Hamilton, has retired from active business on the amalgamation of the various companies controlled by the firm. He entertained the office staff and captains and officers of the company's vessels to dinner April 11, when they made him and Mrs. Mackay a presentation of a silver tea service and cut glass vase.

J. Stewart, Postmaster at Kingston, who acted as the Government representative on the board of arbitration in the dispute between the shipping companies and the Lake Seamen's Union, was for 20 years local manager of the Kingston and Montreal Forwarding Co., and subsequently engaged in the trans-shipping business at Coteau for the Canada Atlantic Transit Co.

The Reid Wrecking Co., Ltd., Sarnia, has been granted judgment against the owners of the steamboat Fred. Pabst, for 65% of the proceeds of the sale of the vessel, after deducting costs and expenses. The Fred. Pabst was sunk in the fall at the entrance to Lake Huron after collision with the steamboat Lake Shore, and has recently been raised by the Reid Wrecking Co

The steamboat Stranger has been sold by A. Dupont, Smith's Falls, to L. Whalen, Kingston. She has been taken to the latter place for an overhauling. The Stranger was built at Hammondsport, U.S., in 1872, and practically reconstructed at Cornwall, Ont., in 1901, her dimensions being: length, 84.3 ft.; breadth, 15.2 ft.; depth, 4.3 ft.; tonnage, 88 gross, 60 register; engine, 4 n.h.p., driving a screw.

The Midland Navigation Co., Ltd., Midland, Ont., has been granted supplementary letters patent, increasing its capital stock to $1,000,000 by the issue of $600,000 of new stock, and extending its powers whereby it may construct or otherwise acquire any

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Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says:

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wharf, pier, dry docks, etc., and build, or otherwise acquire and operate grain elevators, and acquire shares in any company having similar objects.

The Otonabee Navigation Co. has purchased the steamboat Monarch from Harris and McAllister, Gore's Landing, Ont. The vessel will be run on the Rice Lake and Otonabee route. The Monarch was built at Gore's Landing in 1906, and registered at Peterborough, Ont., her dimensions being: length, 84 ft.; breadth, 14 ft.; depth, 5.7 ft.; tonnage, 73 gross, 50 register; with engine of 6 n.h.p. driving a screw.

J. Gaskin, of Kingston, who died there recently, aged 68, was connected with the Canadian marine service for practically the whole of his life. In 1866 he was in command of the steamboat Ranger, and assisted the troops at the time of the Fenian raid on the St. Lawrence. He was connected with the Montreal Transportation Co. as captain, and later as Marine Superintendent for 30 years, and retired from the service in 1902.

The levels of the great lakes for March were: Superior, 601.77; Michigan and Huron, 580.59; Erie, 572.66; Ontario, 247.39 ft. above tide water. Compared with Feb. figures, the level in Superior fell 1¼ ins., and rose in Michigan and Huron 1 in., in Erie 6½ ins., and in Ontario 5 ins. Lake Superior is 2¾ ins. below, Michigan and Huron 5 ins. above, Erie 11½ ins. above, and Ontario 23½ ins. above the average March level for 10 years.

The directors of the London and Port Stanley Ry. have been discussing the possibility of establishing a passenger service on the lake between Port Stanley and the Ohio shore of Lake Erie. At present the Pittsburg and Bessemer Coal Co. operates a coal carrying car ferry to Port Stanley, and its Manager, A. Leslie, told the L. & P.S.R. directors that if there was passenger traffic sufficient to warrant placing a steamer on the route the company would consider the matter. It was not possible to give an efficient passenger service with the coal carrying steamers.

The Imperial Secretary of State for the Colonies, in a despatch to the Governor-General of Canada says, referring to the passage of U.S. warships through Canadian waters to the great lakes: "The whole question of armed vessels on the great lakes has been referred by His Majesty's Government to the Imperial Defence Committee, and His Majesty's Government will further consult your Government." The vessels in question are the San Juan de Austria and the Sandoval, which passed to the lakes last summer, it being stipulated at the time that they were for training purposes only, and were to pass through Canadian waters unarmed.

The Dominion Government proposals for the subsidizing of dry docks, to encourage such construction in the Dominion, provide for the payment of 3% for 20 years on any new dock approved by the Department, the subsidy not to exceed $45,000 a year; and when an existing dock shall be enlarged a payment of 3% for 20 years may be made, not to exceed $15,000 a year, on the cost of such enlargement. The Department must be satisfied that such enlargement is necessary, and must approve plans and specifications, and if any subsidized dock is not efficiently maintained the Government may assume control, repair and operate it until the cost of repairs, etc., has been recovered.

The Dominion Marine Association has submitted to the Department of Marine a recommendation for a light and foghorn at the north-east end of Michipicoten Island; a whistling gas buoy outside of Bad Neighbor shoal; a range light on Kokanongwi Island; a spar buoy on Robertson's rock; one of the special gasolene motor foghorns on Lonely Island and at Collingwood, Ont.; range lights on the north shore at entrance to Kingston harbor, to take the place of the present lights at Pigeon Island and Nine Mile point; the early operation of the foghorn at Presqu'ile and the adoption of the various items previously recommended by the association, which are still under consideration by the Department.

J. Richardson, a well-known mariner on Lake Ontario, who died April 6, began his marine life at 13 years of age, as mess boy on the schooner James Coleman, of St. Catharines, trading on Lake Ontario, and remained on the lake until 1879, when he shipped as mate on the steamship Southern Belle, at Halifax, N.S., which vessel had been utilized as a blockade runner in the American civil war, and was later purchased by Keith & Fitzsimmons, Toronto, and put on the Toronto-Hamilton route. He then transferred to the Niagara Navigation Co.'s steamboat Cibola, which was burned to the water's edge at Lewiston in 1894, since which date he was chief mate of the Chippewa, belonging to the same company.

The President of the Goderich Board of Trade, in his annual review of trade there, said recently: For the season of 1907 the amount of traffic received by water at this port has greatly exceeded that of any preceding year. With the completion of the fireproof grain elevator, the distinctive advantage of this port as a distributing centre for grain to local millers has shown an unprecedented gain. Forty-two steam vessels in all delivered 2,288,260 bush. of wheat, 661,615 bush. of oats, 321,843 bush. of flaxseed, and 69,857 bush. of barley—a total of 3,341,575 bush. Had not the usual car shortage prevailed during Oct. and Nov., the receipts might have reached over 5,000,000 bush., and so great was the demand for winter storage space that double the capacity of elevator space could easily have been filled. To the grain receipts of the elevator must be added about 2,000,000 bush. ground by the Western Canada Flour mills, which was handled into their own elevator.

The Supreme Court of Canada recently delivered judgment allowing the appeal of the Montreal Transportation Co. against the decision of the Local Judge in Admiralty at Toronto, in the action of the New Ontario Steamship Co. against the Montreal Transportation Co., and dismissing the action with costs. The New Ontario Steamship Co. are owners of the steamship Neepawah, and the Montreal Transportation Co. are owners of the steamship Westmount. On the night of Oct. 20, 1904, the Neepawah was proceeding up and the Westmount was proceeding down the Welland canal; they met between locks 23 and 24, and when about half-way past each other two blades of the Neepawah's propeller were knocked off by coming in contact with a boom at the side of the canal. The plaintiffs alleged that the loss of the propeller blades was due to the fault or neglect of those in charge of the Westmount. The Admiralty Court found that there was a collision, or bumping between the sterns of the vessels, which was the primary cause of the broken wheel, and that the Westmount was liable for damages and costs. The Montreal Transportation Co. appealed, and the decision has been set aside and the action dismissed with costs. F. King, Kingston, acted for the M. T. Co.

An order-in-council was passed Mar. 30 making regulations regarding the ferry across the Rainy River between Fort Frances, Ont., and International Falls, Minn., providing that the limits of the ferry shall be co-terminus with the boundaries of Fort Frances, and land adjacent on the north bank of the river between the east boundary of Fort Frances and Pither's Point, where the river emerges from Rainy Lake, and such point on the Minnesota side as may be arranged by competent authority there; that the licensee shall maintain suitable landing wharves, to be available at all states of the river, and be subject to the approval of the Inland Revenue Dept.; that the vessels to be used shall not be less than 18 ft. long by 5 ft. 4 ins. beam, propelled by gasolene engines of not less than 3 n.h.p., but rowboats may be utilized when it is necessary and convenient to do so; that from May 1 to Nov. 1 of every year of the license term, the ferry shall ply between the points named from 7 a.m., and at intervals of not less than one hour until 12 o'clock midnight each day, and shall ply between Fort Frances, Ont., and Ranier, Minn., not less than three times each way every day, or in the alternative whenever signalled by telephone or otherwise; that the fares shall not exceed, for foot passengers, 15c.; returning same day, 25c.; for children under 10, 15c., including return made same day; for passage between 12 midnight and 7 a.m., 25c. each way, between Fort Frances and International Falls or Pither's Point and Ranier; children under 10, 15c. each way, between Fort Frances and Ranier, or between Pither's Point and International Falls; that the licensee find two sureties in the sum of $500 for the full compliance of the terms of the license; that the license shall not be sub-let or assigned, and that the Governor-in-Council shall be at liberty to revoke the license should the terms thereof not be complied with.

Manitoba, Saskatchewan, Alberta, Etc.

The Northern Transportation Co., Ltd., has been incorporated under the Northwest Territories Ordinance respecting companies, with office at Athabasca Landing, Alta.

The Winnipeg Navigation Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $50,000, and office at Winnipeg, to build, purchase, or otherwise acquire, and operate steam and other vessels, and to carry on a general navigation business. The provisional directors are: W. Cowan, Prince Albert, Sask.; A. McKenzie, H. A. Robson, Winnipeg.

The steamboat Wapiti, owned by C. F. Bunnel, Winnipeg, and registered at Kenora, Ont., is to be sold. She was built at Kingston in 1899, and her dimensions are: length, 55.6 ft.; breadth, 9.7 ft.; depth, 4.2 ft.; tonnage, 18 gross, 12 register, and is driven by a screw with engine of 8 n.h.p.

The Department of Marine receives tenders May 1 for chain, swivels and shackles for the ports of Halifax, St. John, Charlottetown, Quebec and Montreal.

Col. F. Gourdeau, Deputy Minister of Marine, having at the request of the Minister undertaken certain work preparatory to an enquiry into the conduct of the department, G. J. Desbarats, heretofore Superintendent of the Sorel, Que., shipyard, has been appointed Acting Deputy Minister of Marine.

The Minister of Customs stated in the House of Commons, April 6, that vessels of Norwegian register and of British build, could, under the law, change to the Canadian register and engage in the coastwise trade of Canada. This could be done under the existing regulation or under those which it is expected will come into effect on the first of next year. However, foreign built ships, though of British register, will have to pay 25% duty to engage in the Canadian coasting trade.

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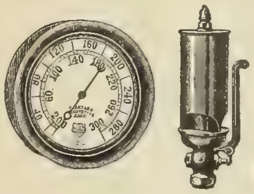

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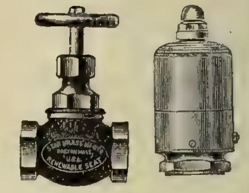

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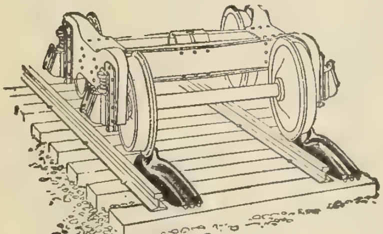

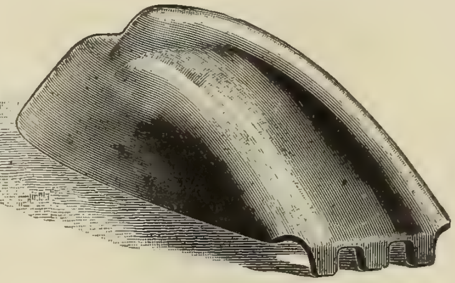

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B.C. and Pacific Coast Marine.

W. Dickson, formerly engineer of the C.P.R. steamship Empress of India, has left the service to join a firm of engineers in Victoria, B.C.

The B.C. Salvage Co.'s tug William Joliffe, which was chartered by the Marine Department, returned to Esquimalt recently after a trip on the northern B.C. coast, to recharge the acetylene gas buoys and beacons on that route.

The Orient Trust, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $25,000, to carry on a general contracting business, and to acquire and operate steam and other vessels, to carry passengers and merchandise therein.

The Seymour River Lumber Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $500,000, to carry on the business of timber merchants, lumbermen, etc., and in connection therewith to purchase, build or otherwise acquire and operate steam and other vessels.

The schooner Edith R. Balcom, of Halifax, N.S., was wrecked and lost recently off the Argentine coast. She was built at Lunenburg, N.S., in 1903; her dimensions were: length 98 ft., breadth 25.9 ft., depth 9.7 ft. She was owned by R. Balcom & Co., Victoria, B.C., and was valued at $16,000, but was only insured for $7,000.

Johnston & Carswell, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000, and headquarters at Long Lake, B.C., to carry on the business of lumbermen, and to acquire and operate tramways, telegraphs, telephones, steam and other vessels, and to act as common carriers by water.

Fleck Bros, Ltd., a company whose head office is at Ottawa, Ont., having a charter to carry on the business of lumbermen, and to build, purchase or otherwise acquire and operate steam and other vessels in connection therewith, has been licensed under the act respecting extra-provincial companies, to carry on business in British Columbia, with office at Vancouver, and J. G. Fleck as its attorney.

The Marion Tug Co. has been formed at Victoria, to purchase and operate the U.S. tug Marion. Her dimensions are: length 70 ft., breadth 17 ft., depth 7 ft., with compound engines, cylinders 8 and 16 ins. diameter, by 12 ins. stroke, supplied with steam by a Scotch boiler, at 200 lbs. pressure. J. H. Greer, who is interested in the Pacific Towing and Lighterage Co., Victoria, and other similar companies, is the manager.

Plans for a lighthouse tender for the Department of Marine, for use on the Pacific coast, have been prepared, providing for a flush deck vessel with two pole masts, and equipped with hoisting machinery. During 1907 the Department had to charter vessels to assist the Quadra, and a decision has now been arrived at to construct a new vessel. The Quadra has been thoroughly overhauled and repaired at Esquimalt, at a cost of over $20,000.

The C.P.R. ferry steamboat Princess Charlotte will, it is expected, be launched shortly. The vessel, which is being constructed at Glasgow, Scotland will be 330 ft. long, and about 2,000 tons gross, and will be practically a sister vessel of the Princess Victoria. Many improvements will, however, be made in the Princess Charlotte, which is being engined to make 24 knots an hour on her trials. J. W. Troup, Superintendent C.P.R. B.C. coast service, sailed for Great Britain recently, in connection with the completion of the vessel, which is intended for the Victoria, Vancouver and Seattle route.

Evidence was taken recently in the B.C. Exchequer Court, on the question as to whether the Dominion Government has exclusive jurisdiction in granting water records on streams within the railway belt in the province. On the part of the province it is contended that whatever the Dominion jurisdiction may be, it is not exclusive, particularly when water records sought are upon streams that are not navigable within the meaning of the British North America Act. The case is a test one, and it is anticipated that whatever the decision, it will be taken to the Judicial Court of the Privy Council to decide what is a navigable stream within the meaning of the act.

Steamer Cascade, Ltd., has been registered under the British Columbia Companies Act, with a capital of $16,000 and office at Victoria, B.C., to purchase as a going concern the steamer Cascade and the freighting business heretofore carried on by P. C. Dougall, F. C. Dougall, and Leeming Bros., Ltd., and with power to build, purchase or otherwise acquire and operate steam and other vessels. The Cascade was built at Vancouver in 1902, and is a screw-driven vessel with engine of 16 n.h.p., her dimensions being: length 95 ft., breadth 22½ ft., depth 7½ ft., tonnage, 119 gross, 81 register.

In our Mar. issue mention was made of the launching of the G.T. Pacific Ry.'s sternwheel steamboat from Alex. Watson's yard, Victoria, for use on the Skeena River. The vessel that was so mentioned was for the Hudson Bay Co. A sister vessel was also on the stocks for the G.T. Pacific Ry., and was launched April 15. The description of both vessels is the same, with the exception that the passenger accommodation on the Hudson Bay Co.'s vessel is greater than on the G.T. Pacific Ry.'s; the latter one having been built almost solely for railway construction purposes. In the building of these vessels, the hulls are made as light as possible without sacrificing strength or elasticity, and the customary rules of construction have been departed from in some points. Each has been built with two main keelsons, instead of one, placed 7 ft. 4 ins. apart, to allow the boilers to be placed lower in the hulls than usual. The machinery in each vessel was made by the Polson Iron Works, Toronto.

Lake Seamen's Wages.

The Lake Seamen's Union made a demand for the adoption of the scale of wages of the Lake Carriers' Association, and for shorter hours, which the Dominion Marine Association did not see fit to accede to. Subsequently application was made under the Lemieux Act of 1907, declaring that a strike would take place in due course, and nominating J. A. Flett, of Hamilton, Ont., as the men's representative on a Board of Conciliation. The dispute which the Union alleged to exist with the Dominion Marine Association was that it had failed to procure an agreement with the Association for which it asked in 1907. Three of the principal terms of the agreement asked for were that the wages and hours should be improved, and that none but Union members should be employed on any of the vessels belonging to members of the Association. The Association urged upon the Department of Labor that it was not an employer of labor within the meaning of the statute and that it had no jurisdiction whatever over the relations between its members and their employes, and further that there was no dispute, inasmuch as the Association simply decided to leave the question to be decided by its individual members. The Association claimed that the proper course for the Department to take was to require the Lake Seamen's Union or its members to take up any trouble they had with individual vessel owners. The Department thought it better to appoint a board, and on the Association declining to nominate a member, appointed on its behalf, Jas. Stewart, Postmaster at Kingston, Ont., and formerly Manager of the Kingston and Montreal Forwarding Co. Messrs. Stewart and Flett met, and nominated Professor A. Shortt, of Queen's University, as Chairman of the Board. An Ottawa despatch, April 8, stated that the Board decided to make recommendations for shorter hours, and for more attention to be paid to the comfort of the men while off duty, but refused to recommend any increase in the wages. The wage schedule in force provides for wheelsmen, $35 to $40; watchmen, $30 to $35; and deck hands $20 to $30, a month.

St. Lawrence Canals Traffic.

In the course of a recent speech the Minister of Railways and Canals gave the following figures with respect to traffic through the St. Lawrence canals:

Down river traffic—		
Wheat	15,461,600	bushels
Corn	3,882,800	"
Oats	3,937,700	"
Flax	1,950,700	'
Barley	414,000	"
Total grain down river	25,646,800	"
Coal	395,200	tons.
Other freight	31,700	'
Passengers	9,981	
Up river traffic—		
Pulp wood	81,000	cords.
Lumber	21,350,000	ft.b.m.
Other freight	117,500	tons.
Passengers	9,005	

Marine Notes from the Dual Ports.

Our Port Arthur, Ont., correspondent wrote April 8: Inter-lake navigation is not likely to open at the twin ports before the 18th or 20th inst. The Booth Line's first boat from Duluth is scheduled to arrive here on the 12th inst. This is made possible by the steamboat James Whalen having kept an open channel from Port Arthur to the open lake all winter, the work of this vessel during the past winter has demonstrated the fact, that a navigable channel can be kept throughout the whole year, and that so far as this end of the lake is concerned, winter navigation is quite possible. Notwithstanding the very mild winter experienced in the Lake Superior region, there is a large amount of heavy ice still on the lake and latest reports from the lower end show that there is solid ice in Whitefish Bay.

There is now in store at the lake front 13,000,000 bush. of all kinds of grain, which will be increased to about 15,000,000 bushels before the opening of navigation by the grain that is now on track here, and on the way. Advices from the west are to the effect that there is little grain left in the country. I think it will be found, however, that there is still a considerable quantity of the better grades of grain still in the farmers' hands, and in the inland elevators.

The general outlook from the vessel owners' standpoint for this season is not very bright. As the Canadian tonnage has a capacity, all afloat at one time, of 6,600,000, it can readily be seen that the grain movement will not last long. Until a good crop is assured in the Northwest, the movement of westbound package is sure to be light. It is expected that more Canadian tonnage will be engaged in the coal and ore trade this year than heretofore.

The Kenora, Regina, Assiniboia, Keewatin, Dunelm, Beaverton, Prince Rupert, Collingwood and Acadian, are among the new ships that will ply Canadian lake waters this season. There are four or five others under contract in British yards that will be out during the season.

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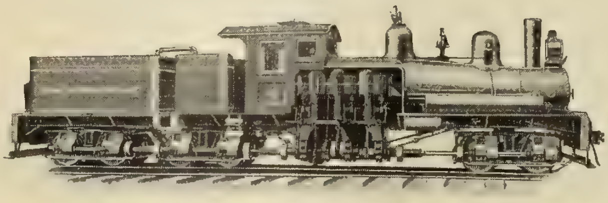

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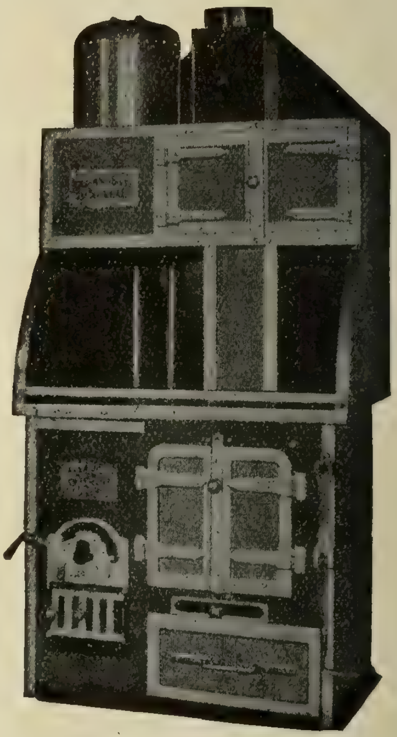

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Vessels Removed from Register.

During Jan. and Feb. the following vessels were removed from the Canadian register for the causes assigned: Steamers: Beaver, Quebec, Que., 104 tons, broken up; Bessie, Vancouver, B.C., 10 tons, broken up; City of Grand Rapids, Sarnia, Ont., 196 tons, burnt; Clinton, St. Catharines, Ont., 292 tons, broken up; Dominion, Windsor, Ont., 304 tons, burnt; Halifax, Vancouver, B.C., 19 tons, broken up; Maple Leaf, Hamilton, Ont., 22 tons, burnt; Raoul, Quebec, Que., 42 tons, burnt and foundered; Vick, Chatham, Ont., 9 tons, broken up; sailing vessels: Acme, Lunenburg, N.S., 91 tons, transferred to Newfoundland; Aquila, Charlottetown, P.E.I., 149 tons, abandoned at sea; Arona, Windsor, N.S., 532 tons, abandoned at sea; Baden Powell, Lunenburg, N.S., 94 tons, stranded; Cecilia, Windsor, N.S., 299 tons, wrecked; Frank and Ira, St. John, N.B., 98 tons, wrecked; Hattie L. M., Halifax, N.S., 88 tons, sold to Chili; Hazel, Lunenburg, N.S., 71 tons, transferred to Newfoundland; J. E. Garland, Digby, N.S., 72 tons, transferred to Newfoundland; Josephine, Annapolis, N.S., 92 tons, broken up; Kenneth C., Parrsboro, N.S., 475 tons, transferred to Barbados; Laura E. Douglass, Barrington, N.S., 39 tons, transferred to Newfoundland; Lena A., Yarmouth, N.S., 11 tons, stranded; Leo, Lunenburg, N.S., 165 tons, transferred to Barbados; Mary Alice, Halifax, N.S., 58 tons, broken up; Messagere, Quebec, Que., 41 tons, broken up; Meteor, Lunenburg, N.S., 99 tons, transferred to Barbados; Nebula, Yarmouth, N.S., 24 tons, stranded; N. N. Gray, St. Andrews, N.B., 13 tons, wrecked; Onondaga, Prescott, Ont., 320 tons, foundered; Onward, Parrsboro, N.S., 15 tons, broken up; Paulette, Quebec, Que., 27 tons, broken up; Precursor, Charlottetown, P.E.I., 46 tons, broken up; St. Joseph, Quebec, Que., 34 tons, wrecked; Trois Saumons, Quebec, Que., 45 tons, broken up; Unity, Pictou, N.S., 248 tons, transferred to Barbados; Valkyrie, St. Andrews, N.B., 16 tons, wrecked.

The following vessels were removed from the Canadian register during March, for the reasons assigned: Steam vessels—Alma T., Winnipeg, 11 tons, broken up; Aurora, Winnipeg, 144 tons, broken up; Olive May, Victoria, B.C., 54 tons, broken up; Red River, Winnipeg, 113 tons, broken up; Shamrock, Collingwood, Ont., 10 tons, wrecked; Surveyor, Montreal, 31 tons, broken up; Urania, Windsor, Ont., 424 tons, sold to U.S.; W. L. Davis, Sault Ste. Marie, Ont., 37 tons, wrecked. Sailing vessels—Aberdeen, Winnipeg, 130 tons, broken up; Annie, Winnipeg, 30 tons, broken up; Arbutus, Pictou, N.S., 32 tons, broken up; Dara C., Parrsboro, N.S., 402 tons, transferred to Barbados; Duluth, Montreal, 337 tons, broken up; Ella G., Victoria, B.C., 16 tons, wrecked; Eva Gertrude, Halifax, N.S., 34 tons, transferred to Newfoundland; G. A. Norman, Montreal, 41 tons, broken up; James Daly, Yarmouth, N.S., 162 tons, foundered; John Boyd, Halifax, N.S., 193 tons, supposed to be out of existence; Katie, Arichat, N.B., 11 tons, broken up; Keewaydin, Halifax, N.S., 188 tons, condemned as unfit for use; Margaret E. Schwartz, Lunenburg, N.S., 98 tons, transferred to Newfoundland; Mermaid, Winnipeg, 19 tons, wrecked; Nelson River, Winnipeg, 219 tons, broken up; Olive Evans, Lunenburg, 77 tons, transferred to Newfoundland; Ouse, Montreal, broken up; Perry C., Parrsboro, N.S., 287 tons, wrecked; Regina, Montreal, 411 tons, broken up; San Juan, Shelburne, N.S., 42 tons, transferred to Newfoundland; Selma, Victoria, B.C., 21 tons, sold to U.S.; Stella, Shelburne, N.S., 77 tons, transferred to Newfoundland; Success, Paspebiac, Que., 199 tons, transferred to Barbados; Sultan, Winnipeg, 32 tons, broken up; Vassal, Montreal, 106 tons, wrecked; Winnipeg River, Winnipeg, 205 tons, broken up.

Notices to Mariners.

The Dominion Department of Marine has issued the following notices:

No. 21. Mar. 24. 55.—Quebec. River St. Lawrence, Orleans Island, Domaine range lights established. 56.—Quebec. River St. Lawrence, Ste. Anne de Beaupre, range lights established. 57.—Quebec. River St. Lawrence, Orleans Island, Ste. Famille, tower built for front range light.

No. 22. April 14.—58.—Ontario. Lake Huron, Goderich, light discontinued. 59.—Ontario. Lake Huron, Southampton, life saving station established. 60.—Ontario. Georgian Bay, Meaford, changes in lighting arrangement. 61.—Ontario. River St. Mary, East Neebish, upper range lights discontinued. 62.—Ontario. River St. Mary, Footes dock, light discontinued.

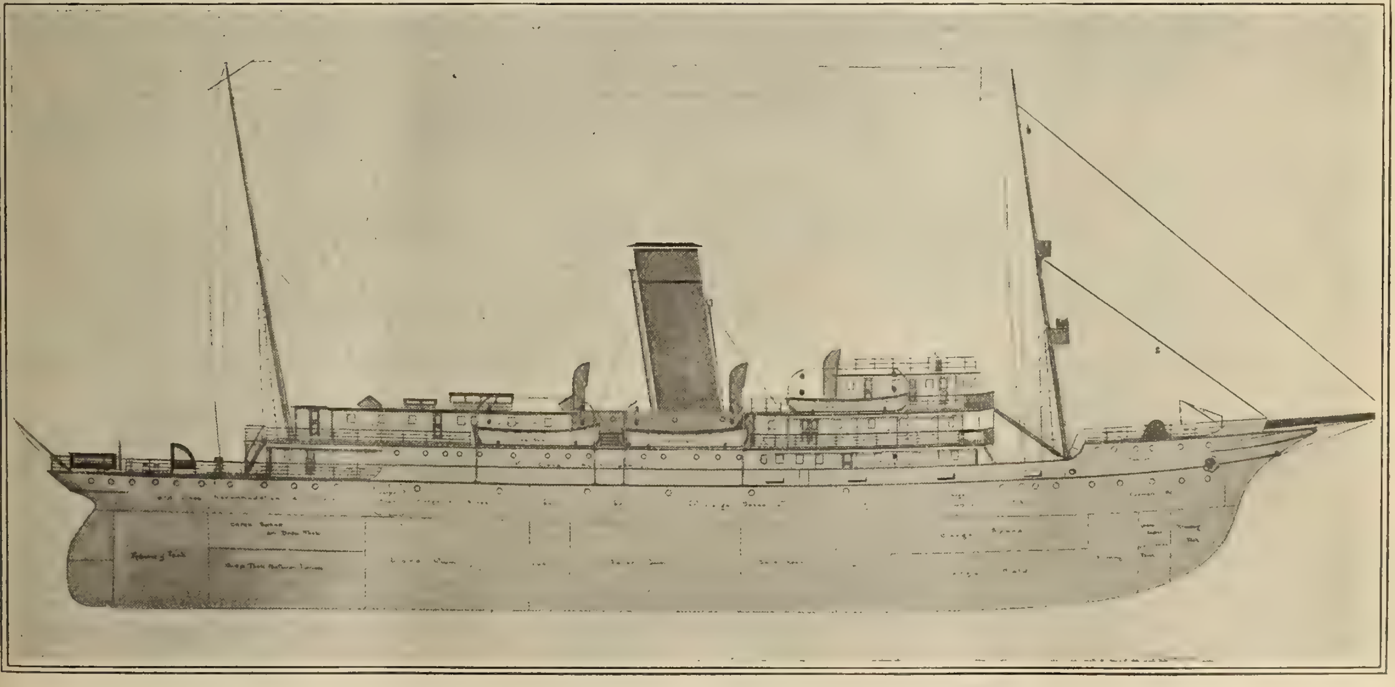
No. 23. April 15.—63—Ontario. Lake Superior, chart, head of Thunder Bay to Pigeon River, issued. 64—Ontario. Lake Superior, chart, Lambe Island to Thunder Cape, issued.

No. 24. April 15.—65—New Brunswick. Bay of Fundy, Chignecto channel, lighthouse moved from Ward point to Peck point. 66—New Brunswick. North coast, Chaleur Bay, Little Belledune point, light mast replaced by tower. 67—Nova Scotia. Bay of Fundy, Port Greville, range lights established. 68—Prince Edward Island. East coast, Souris East breakwater light mast replaced by tower.

No. 25.—April 18.—69. Nova Scotia, Bay of Fundy, Cumberland basin, Amherst basin, range lights established. 70. Ireland, east coast, Blackwater light vessel, character of light altered. 71. England, west coast, Fishguard harbor approach, Strumble head, light and fog signal established. 72. England, south coast, Shambles light vessel, period of fog signal altered.

No. 26.—April 21.—73. British Columbia, Strait of Georgia, Sisters rock, fog alarm established. 74. British Columbia, Strait of Georgia, Baynes Sound, Yellow Island, fog alarm established. 75. British Columbia, Cardero channel, Yuculta rapids, Gillard Island, change in character of light.

No. 27. April 22.—76. Quebec, Gulf of St. Lawrence, Magpie Bay range lights, additional information. 77. Quebec, Gulf of St. Lawrence, Cape Magdalen, change in fog alarm. 78. Quebec, River St. Lawrence, Beaujeu bank, temporary change in position of west end gas and bell buoy. 79. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Ile à Lapierre, light discontinued. 80. Keewatin, Hudson Bay, Port Churchill, Battery beacon destroyed.



ICEBREAKING STEAMSHIP FOR THE NORTHUMBERLAND STRAITS.

A full description of this vessel for the New Brunswick-Prince Edward Island winter service, for which the Department of Marine asked tenders recently, was published in our last issue.

No. 28. April 23.—81. Nova Scotia, southwest coast, Green island bank, depth on shoal. 82. Nova Scotia, south coast, Rugged Island harbor, off Lockport, uncharted rock.

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The U.S. Senate has passed, without a division, the Ship Subsidy Bill, which provides for the payment to 16-knot vessels plying between the U.S. and South America, the Philippines, Japan, China and Australia, $4 per mile, and to 12-knot vessels $2 a mile. Under the bill approved in 1891, these amounts were payable to 20 and 16-knot vessels, respectively.

The Marine Department recently made a proposal that second mates should receive certificates. The Dominion Marine Association, while realizing the advantage of this as a stepping stone to a higher certificate, and also that it would ensure a vessel being in charge of certificated officers, if the second mate were in charge and the superior officers were not on watch, has represented to the Department that it should not be made compulsory upon vessels to carry second mates with certificates.

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Shortages and the Bill of Lading.

The Dominion Marine Association has had prepared a draft bill of lading which it was proposed should be used at least by all grain carrying vessels. It omits the objectionable shortage clause which appears in the present bill, and sets out the reasonable exemption from liability contained in the Harter Act of the U.S., and in the Australian act of similar purport. This bill of lading was just being put in force for the 1908 season of navigation, although the shippers had refused their assent, when Senator Campbell's bill respecting the water carriage of goods was introduced in the Senate. This bill is based upon the U.S. and the Australian statutes. The Dominion Marine Association rather favored this bill, subject to certain very necessary and very reasonable amendments which would bring it more into accord with the Harter Act than the Australian statute. It is proposed, for instance, to use wherever necessary the words of the U.S. statute requiring "due diligence" on the part of the owner in the matter of seaworthiness, so that there will only be a warranty to that extent, and the owner will not be responsible for latent defects where he has taken all proper care. It is proposed, too, that the permitted exemptions should include the additional ones set out in the Dominion Marine Association's draft bill of lading. Further that in sec. 7 it should be required that the bill of lading should state whether the weight or quantity is the carrier's or the shipper's, as any other requirement would be unfair to the carrier; also that in a separate section the shipper should be required to expressly limit the value of the goods if desired; also that notice to the consignee should only be required at the address, if any, given for that purpose in the bill of lading, and that the penalty for default regarding notice should duly apply accordingly. The bill has been discussed at two sittings of the Banking and Commerce Committee of the Senate, and a strenuous opposition is being presented by the Trans-Atlantic lines, whose bills of lading are very long and intricate documents. The committee was to resume consideration of the bill after the Easter holidays, and it was expected that it would be approved with certain amendments, which shippers have endorsed as reasonable.

Lights on Vessels.

The Department of Marine has issued the following notice, respecting the use of lights on small vessels: "Owners, masters, or persons, in charge of small vessels such as pleasure yachts, steam, gasolene, naphtha, electric and other motor launches and row boats, under way or at anchor, in all waters frequented by other vessels, are hereby notified that they must comply with the rules imposed by chap. 79, revised statutes of Canada, entitled, 'An act respecting the navigation of Canadian waters for preventing collisions,' especially as regards the lights to be shown. Attention is also directed to the penalty which the master, owner or person in charge, in fault, shall incur, viz.: not exceeding $200 and not less than $20; which penalty will be enforced if conviction is secured. Cases of violation of the rules brought to the notice of the Department will be prosecuted according to law."

A bill has been introduced in the U.S. House of Representatives, having for its object the removal of the duty of 50% on repairs made to U.S. vessels in Canadian shipyards. Though it is not anticipated that the bill will be passed during the current session, it is said that the duty may be removed when the tariff is revised.

The Albert M. Marshall Collision.

Judgment was delivered recently in the cases of the Montreal Harbor Commissioners vs. the S.S. Albert M. Marshall, and the Great Lakes and St. Lawrence Transportation Co. vs. the Montreal Harbor Commissioners, by Justice Dunlop, of the Quebec Admiralty District. The cause of the actions was a collision between the Great Lakes and St. Lawrence Transportation Co.'s steamboat Albert M. Marshall and the Montreal Harbor Commissioners' dredge no. 1 which occurred Oct. 8, 1906. The cases have been vigorously fought by the parties concerned, many points in English and U.S. law quoted as precedents, and statements filed, by both sides. The last statement filed was in Dec., 1907, which accounts for the delay. Justice Dunlop said: As is usual in cases of this nature, each of the parties accuses the others of being in fault for a multitude of reasons. The evidence discloses that on Oct. 8, 1906, at 9.50 p.m., the dredge no. 1, the property of the plaintiffs, used by them in harbor improvement works at Montreal was placed in the harbor south of the south ship channel, about opposite sec. 22; that there was a watchman on board the dredge at the time of the accident; that the dredge was carrying a light on the A frame, about 20 ft. above the deck, one light at the up stream end of the dredge, and one light on the down stream end of a scow which was fastened to the dredge at the lower or down stream end. That at the time of the accident in question it was a dark but clear night, and there was no rain. The wind was about south-west, blowing at an estimated rate of 17 to 20 miles an hour. That the current flowed northwesterly at a speed of from five to six statute miles an hour; that at the time the steamboat Albert M. Marshall, of 987 tons register and 650 h.p., manned by a crew of about 20, and drawing 4 ft. forward and 11½ ft. aft, was proceeding down stream, on a voyage from Lake Ontario ports to Ha-Ha Bay without cargo, and that at the time in question she was proceeding down stream from the basin formed by the wharves and the Mackay Pier in the harbor, and ran into and collided with the dredge, striking its starboard quarter; that the dredge was sunk and almost completely lost, and the steamboat Albert M. Marshall was also much damaged.

As a great number of United States and English authorities have been cited, it might be well to state at the outset that in considering these questions it must be remembered that there is a radical difference between our law and the law of England. Under the English law a breach of the regulations creates a presumption that the collision was due to that breach; while under the statute concerning shipping in Canada, chap. 113, secs. 914 to 918, R.S.C., a mere breach of a regulation creates no presumption, and the common law applies, and the other side or party must prove the cause of the collision. It is strongly contended in this case that even under the law of England, if the anchoring of the dredge in question in an improper place had been proved affirmatively, and that technically improper lights were shown, and that there was no anchor watch (which facts of course are not admitted in the present case), and further, if shown that these defects or deficiencies had nothing to do with the collision, the dredge would have sufficiently rebutted the presumption of fault. Marsden, on Collisions, says: "The general rule that a vessel under way is prima facie in fault for a collision with a ship at anchor applies, although the latter is brought up in an improper place, or has no riding light, provided the former could have with ordinary care avoided her. It is the bounden duty of a vessel under way, whether the vessel at anchor be properly or improperly anchored, to avoid, if it be possible with safety to herself, any collision whatever. Even if a ship is brought up in the fairway of a river, if the other could with ordinary care have avoided her, the latter will be held solely to blame."

Availing myself of the power which this court has, I have referred to Capt. J. J. Riley the following question, to which the answer is appended: "Could the steamboat Albert M. Marshall, under the circumstances of this case, by the exercise of reasonable care on the part of the officers navigating her, have avoided the collision in question?" Answer, "I am of the opinion that the steamboat Albert M. Marshall could have avoided the collision with the dredge by the exercise of reasonable care and skill." The Albert M. Marshall seems to have been well equipped with all the requisites for safe navigation and with a sufficient crew; but, in passing, I must remark that the master and the mate were navigating in waters that were outside of the limits mentioned in their licenses, and that O. Hamelin, whom the master had engaged as a pilot, had no branch nor license. It is admitted by the master, who was on the bridge, and by the pilot, who says that he took charge of the steamboat when she left the lower lock of the Lachine canal, that the lights (on the dredge) were seen when the steamer came to the end of the Mackay pier; and it is in evidence that dredge no. 1 was placed at least 1,600 ft. below the Mackay pier. It is stated by the master that the two lights, when seen, were about half a point on the port bow, and that they did not alter their bearings when the Albert M. Marshall kept porting. Both the witnesses thought the lights were on a tow or on the stern of some vessel going down stream and keeping on its own proper, that is, the starboard side, of the channel. The presence of the lights should have been a sufficient notification to the navigating officer of the Marshall that there was some sort of craft in the channel; and if he had been in doubt as to the nature or character of the lights he should have followed the usual custom of mariners and approached the lights at slow speed until he was sure of what they were. If the lights were judged to be those of a tow, keeping on her own side of the channel, and if the Marshall meant to take the tow's water, she should have followed the custom of the pilots on this river, and complied with rule 80 of the Harbor Commissioners' regulations for the port, and given one blast of her whistle, signifying that she was directing her course to starboard. The absence of a responding signal on the part of the dredge would have warned the Marshall not to pass to starboard, and if under the impression that it was a tow, why did not the Marshall comply with art. 24, chap. 79, R.S.C. In view of the fact that the collision took place even though the Marshall's engines were rung up full speed ahead, and the helm put hard aport when the dredge loomed up a little on the port bow, I am of the opinion that if even at that time, the speed of the Marshall had been stopped and her helm put hard a starboard, the collision could have been avoided, and it is proved that she could turn quickly at right angles on her helm, and the current, at that place at the rate of at least five miles an hour, would have helped her in the execution of that manœuvre, and she would have gone on the western side of the dredge; but by attempting to go the eastward side, the whole force of the current was pressing her down on the dredge. I am of the opinion that the navigating officer of the Marshall misjudged both his distance from the lights and the strength of the current, and thus

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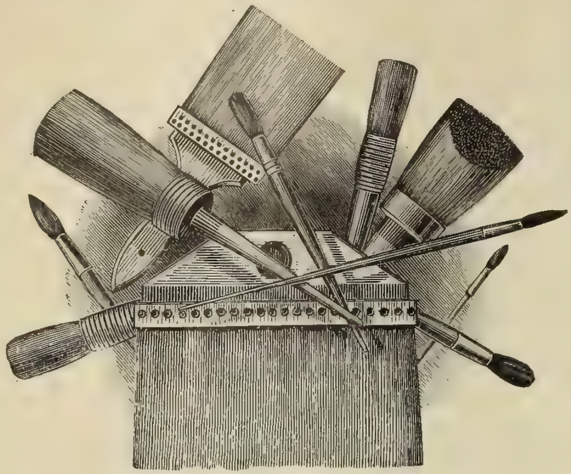

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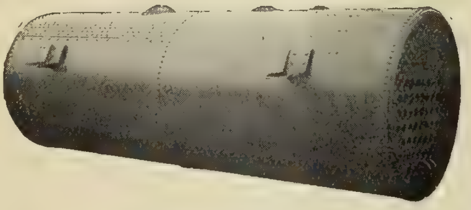

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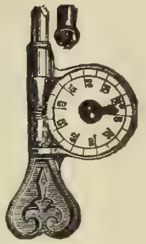

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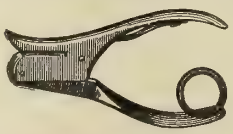

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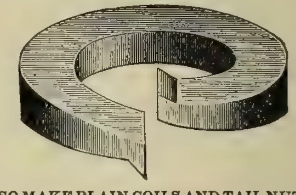

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failed in proper skill, and that by not approaching the dredge more prudently he lacked in proper care. There was about 600 ft. of navigable water between the dredge and the Victoria pier, on the western side of the harbor, and the Marshall could have gone to that side of the dredge with all safety. There was about 300 ft. of navigable water between the dredge and the eastern side for the Marshall's draught of water, and if she had determined to pass on that side she should have shaped a proper course to that end when she first saw the lights, and have taken care to widen the bearing between her and the lights as she approached them. The lookout man on the Marshall was not giving his sole attention to looking out, but was engaged in other duties, that were stated by him as having to be performed before he took his station as lookout man. If, as is admitted, the master of the Marshall saw the lights of the dredge 1,600 ft. off, it is evident that he should have seen them more clearly, say, 300 ft. off, in ample time to avoid them. I concur fully in the advice given me by the assessor, that the Albert M. Marshall could have avoided the collision with the dredge, if reasonable skill and care had been exercised by the master, officers and crew navigating her. As to the faults attributed to dredge no. 1 by defendant, I find that the lights were technically incorrect, though burning brightly at the time of the collision; and that she was brought up in the channel south of what is called the south ship channel, about opposite sec. 22 of the harbor; and that the watchman on board was not on deck when the collision took place. The non-observance by the dredge of any rules on these points is not to be considered as facts contributing to the collision, as the collision could have been avoided by the exercise of reasonable skill and care on the part of those navigating the Marshall. Having carefully considered all the authorities cited on both sides, the evidence of record, and the advice given to me by the assessors, I am of the opinion that the collision in question could have been avoided if reasonable care and skill had been exercised by the master, officers and crew of the Marshall, and I am, consequently, of the opinion that the Marshall and her owner, the Great Lakes and St. Lawrence Transportation Co., are solely responsible for all the damages caused by the collision, and I consequently find in favor of the plaintiffs and maintain plaintiffs' action with costs, and I further order a reference before the Deputy Registrar, assisted by merchants, to report the amount due, within six months from the date of this judgment.

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The Great Lakes Register.—The Dominion Marine Association recently passed a resolution to the effect that while it was quite proper for its members to submit their vessels for inspection and rating by the Great Lakes Register, it was very unfair to expect them to pay fees, and that such payment would not be made. The resolution was communicated in due course, and it is now understood that last year's ratings will probably be accepted by all underwriters. What the Register will do in 1909 is not known, but it is assumed that it will be realized that the rating is for the benefit of the shippers as well as the owners, and that the burden of the fees ought to be distributed.

The Dominion Marine Association has made a representation to the Dominion Government in opposition to the proposal for the levying of a duty on repairs to Canadian vessels effected in the U.S., on the ground that no sufficient facilities are available in Canada for the repairs which are required from time to time.

Compulsory Pilotage Dues.

Under sec. 477 of the Canada Shipping Act, chap. 113, of the Revised Statutes of Canada, 1906, ships propelled wholly or in part by steam are exempt from the compulsory payment of pilotage dues when trading from port to port in the same province; when trading between any one or more of the Maritime Provinces, or Quebec; when employed in trading between any ports in the said provinces and any port in the United States as far south as New York; when trading between any port in the said provinces and Newfoundland; or having a draught when loaded not exceeding 16 ft., and employed exclusively in voyages between any port or ports on Lakes Ontario, Erie, Huron, Superior and Michigan, or on any of the waters connecting those lakes and any port on the St. Lawrence River, or between any ports on the St. Lawrence River. This last exemption in practice only covers the St. Lawrence River as far as Father Point, Que., and the other four exemptions omit mention of Ontario. The Dominion Marine Association is pressing on the Government for an amendment to the law so that Ontario may be placed on the same footing as other provinces. On the other hand it is learned that a proposition is under consideration to do away with the exemption in favor of 16 ft. vessels from Ontario, and the St. Lawrence pilots have been bringing strong pressure to bear on the Government so as to require the employment of pilots upon all vessels passing below Montreal and even upon all vessels moving in Montreal harbor. The Association is of opinion that the men who navigate vessels between Lake Superior and Montreal are quite competent to navigate their vessels down the Lower St. Lawrence, and that the proposed general and compulsory employment of pilots would serve no good purpose and would work great injustice to vessel owners. Even if pilots specially acquainted with the channels must be employed between Montreal and Quebec, the Association urges that its members should not be compelled to employ and pay for men from the limited and special class of Tour de Role pilots, but that they should be free to select at will from the large number of apprentice pilots, available for employment, and that in moving vessels from dock to dock in Montreal harbor no pilot whatever should be required.

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Marine Votes for 1908-09.

A large number of votes have been passed at the current session of the Dominion Parliament for services, etc., in connection with the marine interests of the country, upon the estimates of the Departments of Public Works, Marine and Fisheries, Railways and Canals, and Trade and Commerce. Some of the votes were on capital account, and some on revenue account, while a number were revotes. The votes covered the following:

LIGHTHOUSE AND COAST SERVICE.

Salaries and allowances to lightkeepers.	$37,500.00
Agencies, rents and contingencies......	4,125.00
Salaries for temporary officers, etc.....	2,125.00
Administration of pilotage and pensions	3,500.00
To pay certain pensions...............	600.00
Gratuity to mother of Mrs. C. Taillon...	83.33
Administration of pilotage and pensions and repairs to pilotage steamer Eureka	3,750.00
Maintenance and repairs to lighthouses.	81,250.00
Repairs to lightships.................	2,500.00
Maintenance and upkeep of dockyards..	5,000.00
Construction of lighthouses and aids to navigation, including apparatus, submarine signals, and providing suitable boats for carrying on construction work...........................	275,000.00
Further amount required for the construction or purchase of a lighthouse tender and buoy steamer for the Great Lakes and Georgian Bay (revote)....	18,750.C0
To provide for breaking ice in Thunder Bay and other points..............	5,000.00
To provide for maintenance and repairs to wharves.........................	$ 375.00
Further amount required for the charter of the S.S. Lord Kitchener..........	2,210.00
To charter steamers keeping the channel clear at Lime Kiln Crossing, Detroit River............................	10,000.00
To charter steamers for lighthouse work, additional.........................	38,250.00
Further amount required for keeping lights on wrecked steamers at Bois Blanc............................	3,680.00
Signal service........................	1,125.00
To provide for the building and maintenance of wireless stations.........	16,443.75
To provide telephones at various points in connection with aids to navigation.	1,250.00
To provide for the establishment of telephonic reporting stations along the St. Lawrence River between Montreal and Father Point, Que.............	2,937.50
Further amount required for the completion of Western wireless stations..	1,800.00
Further amount required for expert service in connection with reorganization of bookkeeping of Department of Marine...........................	14,000.00

RIVER ST. LAWRENCE SHIP CHANNEL.

Various works, unspecified............	$760,000.00
Purchase of yard property Sorel (revote)	30,000.00
Permanent piers Lake St. Peter and other points......................	100,000.00
Completion and construction of dredging plant for work between Montreal and Father Point, Que..................	213,000.00

CANALS.

Canals generally, including statistical officers...........................	$ 10,000.00
QUEBEC CANALS.—Steam road roller and stone crusher......................	875.00
Re-marking boundaries, surveys, etc....	1,250.00
Dredging............................	2,312.50

LACHINE CANAL.

Staff..............................	$ 15,000.00
Rebuilding slope walls...............	29,843.75
Testing cement......................	312.50
Building wharf and basin.............	37,500.00
Wall north side basin no. 2..........	12,250.00
Wall side basin no. 2................	6,125.00
Workshops...........................	1,875.00
Rebuilding slope walls, extra.........	124,000.00
To complete electric installation.......	4,000.00
To reimburse Lachine and Soulanges repairs appropriation for leak at lock no. 1 Lachine......................	21,700.00

BEAUHARNOIS CANAL.

Improvements and repairs............	$ 1,250 00

SOULANGES CANAL.

Improvements and repairs............	$ 2,287.50
To pay Manning & Macdonald's claim for material supplied (revote)........	14,271.00
Gratuity to widow of A. Mercier.......	160.00

CHAMBLY CANAL.

Land damages.......................	$ 62.50
Renewing telephone line..............	750.00
Renewing wharf at St. John's, Que.....	687.50
Harbor improvements at St. John's....	6 550.00
Strengthening banks Ste. Therese......	1,125.00
To complete macadamizing tow paths...	1,250.00
To macadamize road west side of canal.	370.00
New power house at bridgeweir no. 2...	625.00
Alterations and additions lockhouse 4...	187.50

CARILLON AND GRENVILLE CANAL.

To macadamize roadway..............	$ 1,312.50
Protection beams for lock gates........	375.00
Renewing Carillon lighthouse..........	112.50

CORNWALL CANAL.

To rebuild river wall foot of canal......	$ 312.50
To build gate lifter..................	1,250.00
To complete lockbank, lock 24.........	1,250.00
Storage room for spare gates...........	250.00
Repairs to north bank between gates 18 and 19...........................	695.00
To fill in space between old and new locks, foot of canal.................	6,000.00
Gratuity to widow of J. McMiry........	93.00

GALOPS CANAL.

Upper entrance, final estimates........	$ 875.00
" " " " "	16,900.00
North channel and cut dam between Les Galops and Adams Island...........	5,108.75
Les Galops and Adams Island, final estimate...........................	15,000.00
Removing shoals in river, upper entrance to canal...........................	2,512.50
To build retaining wall...............	500.00
Concrete superstructure at upper entrance	625.00

RAPIDE PLAT CANAL.

Concrete superstructure south entrance.	$ 125.00

MURRAY CANAL.

Rebuilding pier of concrete...........	$ 3,125.00
Houses for bridgemen................	625.00

RIDEAU CANAL.

Repairs............................	$ 2,000.00
Improvements.......................	3,562.50
To complete purchase of tug and fittings	1,500.00
Rebuilding apron, etc., Hogsback......	16,000.00
Rebuilding waste weir Black Rapids....	3,000.00
Gratuity to widow of N. W. Clarke.....	153.54

TRENT CANAL.

Construction	$125,000.00
Improvements	5,625.00
New lock and dam, Lindsay, Ont	10,000.00
Dam at Buckhorn	3,125.00
New dredge	1,875.00
To complete purchase of steamboat	4,063.00

WELLAND CANAL.

For surveys	$ 2,500.00
Electric lighting and power plant	6,250.00
Removing centre piers and rebuilding bridge at Queen St. and Homer Road	3,750.00
To widen canal near Welland	6,875.00
Retaining wall in rock cut	10,000.00
Port Colborne improvements	14,375.00
" " elevator	21,500.00
Port Maitland, renewing entrance piers	12,500.00
Repairs to foundations, lock no. 2	1,500.00
Stone protection to bank	1,250.00
Deepening ditches and enlarging culverts	1,875.00
Heavy repairs at various points	3.750.00
Fire pump for repair shop	312.50

SAULT STE. MARIE CANAL.

Construction	$ 13,125.00
New lock gates	2,500.00

HARBORS, RIVERS, ETC.

Removing obstructions in navigable rivers	$ 23,600.00
Harbor, river and bridge works generally	1,250.00
Maritime Provinces generally—to purchase creosoted lumber	2,500.00
Repairs improvements, etc., to piers, wharves, etc., in Prince Edward Island	1,000.00
Ditto, at 77 points in Nova Scotia	34,945.00
Ditto, at 29 points in New Brunswick	28,143.75
Ditto, at 107 points in Quebec	134,531.00
Ditto, generally in Quebec	16,000.00
Ditto, at 62 points in Ontario	171,797.00
Ditto, at 5 points in Manitoba	3,687.50
Ditto, at 4 points in Sask. and Alta.	4,500.00
Urgent provisional improvements in Lesser Slave River, Alta	6,000.00
Repairs, improvements, etc., to piers, wharves, etc., at 5 points in N.W.T.	$ 33,500.00
Ditto, generally in N.W.T.	625.00
Ditto, at 14 points in B.C.	20,800.00
Improvements Lewis and Yukon rivers	937.50

ST. JOHN, N.B.

Harbor repairs and dredging	$ 50,000.00
Improvements, etc	330,000.00

QUEBEC.

Harbor improvements	$ 62,500.00

PORT COLBORNE, ONT.

Harbor improvements	$ 2,500.00

MIDLAND AND TIFFIN, ONT.

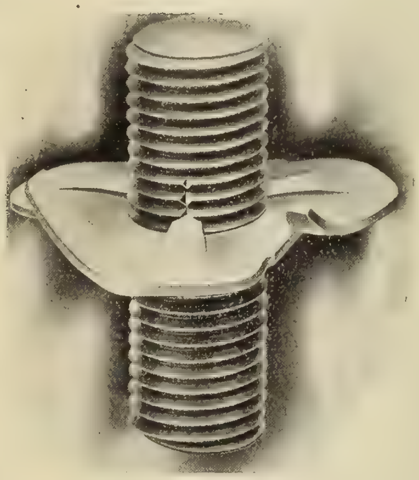
Improvements	$ 9,375.00
Dredging at Tiffin	76,500.00

GEORGIAN BAY TO MONTREAL.

Surveys for waterway via French River to Ottawa River	$ 5,000.00

PORT ARTHUR AND FORT WILLIAM, ONT.

Harbor and river improvements	$ 62.500.00



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On first and third Tuesdays each month until further notice through tourist sleeping car without change, Chicago to Houston, Texas, leaving 6 p.m., on above Tuesdays. Very low abnormal rates, "Homeseekers," as for instance, Chicago to Houston and return, $25.00; New Orleans the same, good 30 days. Special homeseekers' round trip rates to the South and Southwest.

Tourist rates to Arizona, Mexico, and California, liberal stopover privileges. Rates via New Orleans as low as via any other route.

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W. H. HENRY, Can. Pass. Agent,
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A. A. HEARD, Gen. Pass. Agent,
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Sterling exchange bought and sold. Letters of credit issued available in any part of the world.

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Improvements at St. Andrew's Rapids..	$ 99,500.00

DREDGING.

Dredge vessels, repairs	$ 39,375.00
New dredging plant, generally	37,500.00
" " " Maritime Provinces	12,500.00
" " " Ontario and Quebec	13,750.00
" " " Manitoba	1,875.00
" " " British Columbia	12,500.00
Dredging—General service	625.00
" Maritime Provinces	37,500.00
" Quebec and Ontario	153,875.00
" Manitoba	3,750.00
" British Columbia	9,375.00

GOVERNMENT STEAMERS AND ICEBREAKERS.

Maintenance and repairs	$620,000.00
Winter mail service	16,000.00
Further amount required for construction of icebreaking steamer for Northumberland Straits	150,000.00

FISHERIES.

Fisheries protection service	$ 31,250.00
To provide for the construction of a cruiser for the Pacific Coast (revote)..	28,125.00
To provide for the reconstruction of the S.S. North	10,000.00
To provide for the purchase of gasolene launches for British Columbia	6,700.00
To pay owners of U.S. fishing tug Kitty D., expenses occasioned by seizure by Government cruiser Petrel	3,000.00

MAIL SUBSIDIES AND STEAMSHIP SUBVENTIONS.

Ocean mail between Great Britain and Canada	$158,750.00
Halifax, N.S., and St. John's, Nfld., to Liverpool	2,500.00
St. John, N.B., to Glasgow	1,875.00
St. John to Dublin and Belfast	937.50
St. John and Halifax to London	5,000.00
Between a port in Prince Edward Island and Great Britain	875.00
Between Montreal, St. John and Halifax and Manchester	4,375.50
Between Annapolis, N.S., and London or Hull	625.00
Between Canada and South Africa	18,250.00
Between Canada and Mexico	12,500 00
Between St. John and Halifax, and the West Indies and South America..	10,087.50
Between Canada and New Zealand	6,250.00
Between Canada and Australia	3,471.13
Between Victoria, B.C., and San Francisco, Cal	375.00
Between Victoria, Vancouver and Skagway, Alaska	1,562.50
Between Victoria and west coast of Vancouver Island	625.00
Between Port Essington or Port Simpson and Queen Charlotte Islands	187.50
Between Prince Rupert and Jedway, Queen Charlotte Islands	93.75
Between Canada and Newfoundland	2,500.00
Halifax, via Cape Breton ports to Newfoundland	250.00
Prince Edward Island, Cape Breton and Newfoundland	1,000.00
St. John to Westport and way ports	187.50
Halifax to Spry Bay and other ports	312.50
St. John and Annapolis Basin points	187.50
St. John and Cumberland Basin points	375.00
Mulgrave to Guysboro, N.S	625.00
Mulgrave to Chetticamp, N.S	625.00
Between Baddeck, Grand Narrows, Iona, Big Pond and East Bay	625.00
Between Mulgrave and Bras d'Or lakes	750.00
" Pictou and Chetticamp	250.00
" Sydney and Whycocomagh	125.00
" St. Stephen and St. Croix river points	375.00
" Sydney and Bay St. Lawrence	187.50
" Halifax and Canso, N.S	500.00
" Petit de Grat and Mulgrave, N.S	500.00
" Moncton and Petitcodiac River points	250.00
" St. John and Clementsport	187.50
" Newcastle and Miramichi River points	187.50
" St. John and Morden	187.00
" Froud's Point and Lockport	75.00
" Pictou, N.S., and various points, P.E.I	375.00
" St. John and Minas Basin points	375.00
For 52 weekly trips between St. John and Halifax, via Yarmouth	1,250 00
From a mainland port to Grand Manan	625.00
From the mainland to Prince Edward Island	1,562.00
From Baddeck to Grand Narrows	825.00
From the mainland to Magdalen Island	1,875.00
Between St. John and Digby	2,500.00
Between Quebec, Gaspe Bay and way ports	1,062.00
Between Gaspe Bay and Dalhousie or Campbellton	1,875.00
Between Quebec and Blanc Sablou, etc	2,500.00
Between Murray Bay and River Ouelle	750.00
Between St. Catharines Bay and Tadousac	312.50
Between Quebec and Isle of Orleans (at a special season)	62.50
Between Gaspe Basin and North Shore of the St. Lawrence (at a special season)	125.00
Between Bonaventure River and Petit Roches	$ 375.00
To promote steam communication between the mainland and Pelee Island, Ont	187.50

MISCELLANEOUS.

Hydrographic surveys	$ 21.250.00
Marine hospitals, care of sick seamen, etc.	16,250.00
Shipwrecked and distressed seamen	375.00
Steamboat inspection	5,375.00
Inspection of Government steamers, etc.	562.50
Examination of masters and mates	12,600.00
Rewards for saving life, including life-saving stations	31,600.00
Investigations into wrecks	9,000.00
Expenses of schools of navigation	10,000.00
Registration of shipping	2,000.00
Cattle inspection, salaries and expenses	3,600.00
Tidal service—Steam windlass for deep sea anchorage for S.S. Gulnare	3,000.00
Wrecking plants—To continue subsidy for same at Quebec, Maritime Provinces and British Columbia	30,000.00
Maintenance of vessels patrolling northern waters and additional services in connection therewith	50,000.00
Naval militia, and expenses in using the cruiser Canada as a training ship	10,000.00
Further amount for maintenance of S.S. Lady Grey, on trip down St. Lawrence	2,360.00
Gratuity to daughter of R. Angus	166.66
Unforeseen expenses generally	5,000.00

* * *

Among the Express Companies.

The Canadian Ex. Co. has opened offices at Avondale, N.S.; Bellisle, N.B., and De Lotbiniere, Que.

The Toronto Milk and Cream Producers' Association appointed a deputation recently to confer with the Board of Railway Commissioners regarding express rates on milk.

In consequence of the Dominion Ex. Co.'s extension of its service on the Guelph and Goderich (C.P.R.) line, deliveries from Toronto will in future be made at Walton direct, instead of at Wroxeter, and thence to Walton by the stage.

The Dominion Ex. Co. recently carried a shipment of 1,650 live lobsters from the Atlantic coast to Vancouver, B.C., in a special car, for the Dominion Government. The shipment was made for the purpose of attempting to propagate lobsters on the Pacific coast.

The Board of Railway Commissioners for Canada has extended to June 1, the time fixed for authorizing the use of contracts, conditions, by-laws, and regulations of the Canadian, Dominion, Maritime, National, American, Pacific, and Great Northern Ex. companies.

The Dominion Ex. Co. has issued a writ against J. Maughan & Son, Toronto, to recover $1,395.13, alleged to be due on money orders issued by that firm as agents of the company, between Oct. 26 and Nov. 28, 1907. It is said that these orders were issued by H. Maughan, who has since left Toronto.

Supt. Vickers, of the Dominion Ex. Co.'s Atlantic Division at Montreal, in a recent interview stated that many shipments were still marked "via New York," by consignees when it was desired to expedite transportation, and very often such shipments were from 20 to 50 hours later in reaching their destinations than consignments sent by the C.P.R. or Allan Line steamships from Liverpool, Eng. Express goods, he added, could get through the Canadian Customs under special arrangement, with practically no delay, but at New York were frequently delayed a whole day.

* * *

A C.P.R. telegraph operator at Mackeys, Ont., was sentenced at North Bay, Ont., April 15, to three months' imprisonment, for being intoxicated whilst on duty

The total number of employes on the Intercolonial Ry. is 8,291, distributed as follows: Maintenance of way and structures, 2,077; maintenance of equipment, 2,332; conducting transportation, 3,342; general administration, 540.

An Express Suit in England.

The case of Hands vs. The Dominion Express Co. came up in the Westminster County Court, London, Eng., Mar. 27, for Judge Woodfall's reserved decision on an application to stay the proceedings on the ground that the action should be tried in Canada. H. Simmons was for plaintiff; H. Nield, M.P., for defendants. Wesley Upton, a young telegraph operator, absconded from the defendants' service at Yorkton, Sask., and took, among other things, a book of money orders. He found his way to England and went to the bureau de change of the plaintiff, P. Hands, at Charing-Cross, where he was paid £205 10s. in exchange for the company's orders. He was paid partly in Bank of England £5 notes. The orders were returned to the plaintiff stamped "Bad. Not good." The police eventually arrested Upton at Brighton, and six £5 notes were found on him, which the plaintiff claimed formed part of what he had paid him for the orders. Upton was extradited, and was sentenced in Canada, the Judge ordering the property found in his possession to be given up to defendants. The plaintiff had been a money-changer for 40 years, at 16 Strand, Charing-Cross, and changed these orders in the usual way. It was contended his cause of action arose in England in the jurisdiction of this Court. In support of the application, it was contended the trial should be in Canada, where the cause of action arose, and the balance of convenience necessitated that the trial should be there. Interrogatories had been administered, and the proper person to answer them was the Secretary of the Company, who was in Canada. This Court had no power to appoint a commission to take evidence in Canada. The Judge remarked that he could send the case to the High Court. In opposition to the application, it was urged that the evidence from Canada was purely formal. The evidence of fact was in England, and on the question of Upton's having stolen the orders, the plaintiff was prepared to admit the theft and that Upton was properly convicted.

Judge Woodfall came to the conclusion he must dismiss the application with costs, but would give leave to appeal, hoping there would be an appeal, as it would air the fact that he was given power to hear this case, but not to order a commission to get the evidence. He was of opinion it would be for the balance of convenience for the trial to take place in London. He could not see why the plaintiff should be put to the trouble of bringing this action in Canada, because the evidence necessary could be ascertained by affidavit. There was the point of law as to what was the law in Canada as to ordering, after conviction of the thief, the handing over of property that had been stolen, but he thought an expert might be found in England competent to say whether the English and Canadian laws were analogous. The plaintiff had to prove possession by the person convicted of his property, and that evidence was to be found in England.

* * *

Cutting of Ties, etc., in Ontario.—Replying to a question as to the quantity of lumber cut in Ontario, and the prices charged by the Government during 1907, the Minister of Lands, Forests and Mines gave details, April 7, from which it appeared that for railway construction, and the working of mines, the quantity allowed to be cut by the permits issued was 4,153,000 ft., b.m., of pine, the price for which was $7.50 per 1,000 ft. b.m. Under sec. 13, sub-sec. 4, chap. 18, of the Statutes of 1907, permits were issued to cut 1,100,000 ties within the 18-mile belt G.T. Pacific Ry., at 5c. each. Permits to cut ties elsewhere covered 4,659,800 ties of various kinds, the prices charged for which was 10c. each.

Telegraph and Cable Matters.

S. Y. Clifton, engineer of the Marconi Wireless Telegraph station, St. John, N.B., was married there, Apl. 7, to Miss E. G. Payne.

G. Marconi has been elected managing director of the Marconi Wireless Telegraph Co., Ltd., London, Eng., succeeding H. C. Hall, resigned.

The Dominion Government owns 73 wireless telegraph stations in the Gulf of St. Lawrence and on the Atlantic coast. Of these, three are low power stations, and are run at a cost of $5,000 each, and 10 are high power stations, costing $10,000 each. The Marconi Wireless Telegraph Co. is paid $2,500 and $3,500 each, respectively, for operating them and retains the tolls received.

The Railway Telegraph Superintendents' convention will be held at Montreal, June 24 to 27, when papers on a variety of subjects appertaining to railway telegraph systems will be read. Arrangements have been made with the C.P.R., G.T.R., the Quebec Ry., Light and Power Co., and others, for a series of trips to Quebec, Lachine, Ste. Anne de Beaupre, and on the Saguenay River and Lachine Rapids. The entertainment committee includes W. J. Camp, C.P.R. Telegraphs, and W. W. Ashald, G.T.R. Telegraphs.

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Association of Railway Telegraph Superintendents.

This Association will meet in Montreal, June 24 to 27, when the following papers will be read:

Dry batteries on telegraph wires, U. J. Fry, C.M. and St. P. Ry.; Reduction of telegraphing by use of printed forms, O. C. Greene, N.P. Ry.; Commercial reports, G. C. Kinsman, Wabash Ry.; Wiring of station buildings from the contractor's standpoint, J. H. Jacoby; Adverse railway legislation E. A. Chenery, Missouri Pac. Ry.; My experience while in charge of telegraph work on the Isthmus, C. F. Annett; Qualifying operators for train despatching, C. S. Rhoads, C.C.C. & St. L. Ry.; Selecting operators for railroad use, L. H. Korty, Union Pac. Ry.; Moving trains by visible signals, L. B. Foley, D.L. and W. Ry.; Block signals, H. C. Hope, C., St. P. M. and O. Ry.; The telephone, F. F. Fowle; Use of telephones in connection with train movements, W. W. Ryder, C.B. and Q. Ry.; The Interstate Commerce Commission, C. Selden, Baltimore and Ohio Rd.; Past, present and future of the Association of Railway Telegraph Superintendents, W. F. Williams, Seaboard Air Line.

The entertainment features will include a trip to Lachine by G.T.R. and return by R. and O.N. boat, an electric car trip round Montreal, a trip to Quebec by C.P.R., and a trip to Ste. Anne de Beaupre by Q.L. and P. Co.

The organization is as follows: President, E. P. Griffith, Erie Ry., Jersey City, N.J. Vice-President, W. J. Camp, C.P.R., Montreal.

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90 MINUTES TO LAKEWOOD
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New York to
PHILADELPHIA IN 2 HOURS
Every Hour on the Hour
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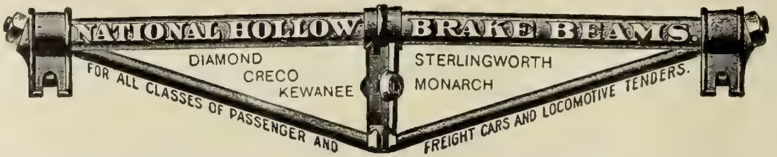
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FOR ALL CLASSES OF PASSENGER AND FREIGHT CARS AND LOCOMOTIVE TENDERS.
DIAMOND, CRECO, KEWANEE and all types of solid brake beams
More than 5,000,000 now in use
MONITOR BOLSTERS AND "CRECO" ROLLER SIDE BEARINGS

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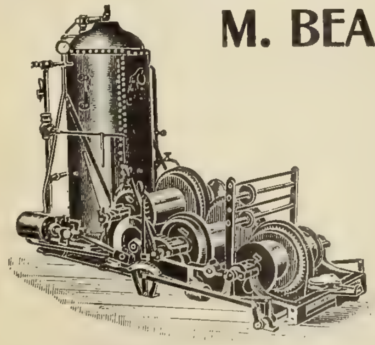
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DREDGES, DITCHERS
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SUBMARINE ROCK DRILLING MACHINERY
Hoisting Engines, Centrifugal Pumps for Water and Sand, Stone Derricks, Clam-Shell Buckets, Steel Skips, Coal and Concrete Tubs and other Contractors' Machinery.

Anti-Rail Creepers
Made under Laas & Sponenburg, Canadian patents Nos. 97586, 97268, 97269. Shipments made from Walkerville, Ontario.
Belle City Malleable Iron Co.
RACINE, WIS.

JAMES PLAYFAIR, Pres. & Gen'l Mgr. D. L. WHITE, Vice-President. J. W. BENSON, Sec'y-Treas.
MIDLAND TOWING & WRECKING CO., LTD., MIDLAND, ONT., CANADA
First-Class Tugs for Wrecking, Raft Towing, etc. Steam Pumps, Divers, Jacks, Hawsers and Lighters

Sec.-Treas., P. W. Drew, Wisconsin Central Ry., Milwaukee, Wis. Committees of Arrangements: W. J. Camp, C.P.R., Montreal; W. W. Ashald, G.T.R., Montreal; E. H. Millington, M.C.R., Detroit, Mich.; G. C. Kinsman, Wabash Ry., Decatur, Ill.; M. Magiff, C.V.R., St. Albans, Vt.; S. A. D. Forristall, B. and M.R., Boston, Mass.; N. E. Smith, N.Y., N.H. and H.R., New Haven, Conn. Ladies Reception Committee: Mrs. W. J. Camp, Mrs. J. Kent, Mrs. W. W. Ashald, Mrs. T. Rodgers, Mrs. J. F. Richardson, Miss A. Jennings, Miss Gladys Camp.

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Dominion Telegraph and Telephone Lines.

The Dominion Parliament at its current session passed the following vote on account of maintenance repairs, construction and operation of telegraphs and telephone lines owned and operated by the Dominion Government, through the Department of Public Works:

Telegraph service generally	$ 1,500.00
Public Works Agency B.C., maintenance, etc.	375.00
Re-poling Meat Cove and Ingonish land line, Nova Scotia	187 50
Operating and maintenance Prince Edward Island and mainland	875.00
Land cable telegraph lines Lower St. Lawrence and Maritime Provinces, including working expenses of vessels required for cable service and Marconi wireless telegraph system at Belle Isle Inlet	15,000.00
Ditto	15,000.00
Cape Breton Island telegraph lines, Meat Cove-North Sydney-Port Hawkesbury section, extension of Grand River Station—Loch Lomond branch line to Enon	400.00
North Sydney-Scattarie section, improvement	600.00
Improving repairing service along the North Shore of the St. Lawrence, Que.	500.00
Extension of land line on east side of the Saguenay River from St. Charles to Peribonka, Que	125.00
To pay J. C. Taché, Supt. at Chicoutimi	37.50
Operating expenses Saskatchewan and Alberta	3,750.00
Ditto	2,000.00
Land line from Kamsack, Sask., to the Kamsack Indian Agency, to be operated by telephone	450.00
New building at Battleford, Sask., for office and operator's residence	350.00
New building at Saddle Lake, Sask., for office and agent's residence	400.00
Extension to Pender and Mayne islands, of the Salt Springs Island telephone line	250.00
Improvements Victoria - Cape Beale, B.C., line	750.00
Improvements Vernon-Kelowna - Penticton line	437.50
Improvements Vernon-Lundy line	212.50
Ditto	600.00
Operating expenses B.C., inclusive of proportionate cost of maintenance Parksville-Alberni-Cape Beale line jointly with C.P.R.	3,725.00
Improvements Kamloops - Nicola - Penticton	4,000.00
To provide for the settlement of the C.P.R. claim for share of the cost of maintenance of B.C.-Alberni-Cape Beale line (revote)	7,800.00
Part re-poling Ashcroft-Quesnel section of the Ashcroft-Yukon line	250.00
Operating expenses Ashcroft-Dawson line	22,500.00
Ditto	17,000.00
To complete payments on extension of line beyond Aberdeen to Kaien Island and Prince Rupert	1,525.00

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C. W. Gamble, B.Sc., has been appointed Provincial Inspector of Railways in and for the Province of British Columbia.

The Dominion Parliament, at the current session, voted $312.50 as the contribution of the Government railways towards the foundation of a school of railway engineering and transportation in general in connection with the Faculty of Applied Science of McGill University, Montreal.

During Feb., 24 employes were killed and 28 injured on Canadian railways. Of the fatalities, 7 deaths were due to explosions, 7 to being run over by cars, 3 to collisions, 2 to derailments, 2 to falls, and one each to being struck by engine, falling material, and to being caught between cars. Of the non-fatal accidents, 5 were due to being struck by cars, 5 to derailments, 3 to collisions, 3 to being caught between cars, 2 each to machinery and falling materials, and one each to explosion, exposure and to being run over. In connection with the fatal accidents, it is noticed that 9 out of the 24 deaths were of men concerned in the operation of trains, the remainder being chiefly engaged in construction, and maintenance of way.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Advertising Matter
Valentine & Sons Publishing Co..........Montreal.

Aerated Waters
E. L. Drewry........................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co....................Toronto.
Canadian Westinghouse Co......Hamilton Ont.

Ales
E. L. Drewry........................Winnipeg.

Angle Bars
Hamilton Steel & Iron Co.......Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co........Racine, Wis.

Automobiles
Polson Iron Works, Ltd ....Toronto.

Axes
James Smart Mfg. Co............Brockville, Ont.

Axe Steel
Montreal Steel Works..................Montreal.

Axles
James Hutton & Co....................Montreal.
Jas. W. Pyke & Co.....................Montreal.
Rhodes, Curry & Co...............Amherst, N.S.
Taylor & Arnold........................Montreal.

Badges
R. Woodman Mfg. & Supply Co....Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co....Boston, Mass.

Beaçons
International Marine Signal Co.........Ottawa.

Bearings, Side
Chicago Railway Equipment Co.....Chicago, Ill.

Blankets and Bedding
The Hudson's Bay Co..........................

Blasting Powder
Standard Explosives Limited...........Montreal

Boilers
Babcock & Wilcox (Ltd.)..............Montreal.
Canada Foundry Co......................Toronto.
Jno.McDougall,Caledonian IronWorks Co. Montreal
Polson Iron Works......................Toronto.

Boilers, Portable
Canada Foundry Co......................Toronto.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.)..............Montreal.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.)..............Montreal.

Boilers, Water Tube
Babcock & Wilcox (Ltd.)..............Montreal.
Jno. McDougall,Caledonian Iron Works Co.Montreal

Boilers Tubes
Jas. W. Pyke & Co.....................Montreal.

Bolsters
Dominion Car and Foundry Co........Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited.......................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co. .Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.
N. J. Holden Co., Ltd..................Montreal.
Railway Materials Co...........New York City.

Brass and Copper Cloth
The B. Greening Co............. Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited ....Toronto.

Bridges
Canada Foundry Co......................Toronto.
Canadian Bridge Co............Walkerville, Ont.
Dominion Bridge Co....................Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd..........Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.

Bumping Posts
McCord & Co........................Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co. .New York.

Buoys
International Marine Signal Co.........Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co................Montreal.

Caboose Heaters
Geo. R. Prowse.........................Montreal.

Car Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Car Cleaner
Modoc Soap Co...............Philadelphia, Pa.

Car Closets
Duner Co...........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd..................Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co. .New York.
Canadian Gold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co...New York.

Car Jacks
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co.....................Montreal.
Mussens Limited.......................Montreal.

Car Kitchen Equipments
Geo. R. Prowse.........................Montreal.

Car Lighting
Bliss Electric Car Lighting Co...Milwaukee, Wis.
Consolidated Ry. Electric Light. & Equip. Co., N.Y.
Canadian Cold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co.....................Montreal.
Mussens Limited.......................Montreal.
R. Woodman Mfg. & Supply Co ....Boston, Mass.

Car Ranges
Geo. R Prowse..........................Montreal.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd..................Montreal.
F H. Hopkins & Co.....................Montreal.

Car Seals
R. Woodman Mfg. & Supply Co.....Boston, Mass.

Car Wash Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Cars
American Car and Equipment Co....Chicago, Ill.
Canada Car Co., (Ltd) ....Montreal, Que.
Crossen Car Mfg. Co.............Cobourg, Ont.
Dominion Car and Foundry Co........Montreal.
J. T. Gardner ....Chicago, Ill.
Hart-Otis Car Co. (Ltd.) ....Montreal.
Hotchkiss, Blue & Co..............Chicago, Ill.
Kilgore-Peteler Co...........Minneapolis, Minn.
Preston Car and Coach Co., Ltd.. Preston, Ont.
Rhodes Curry & Co...............Amherst, N.S.

Cars, Coal
Kilgore-Peteler Co...........Minneapolis, Minn.

Cars, Mine
Canadian Fairbanks Co., Ltd..........Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.

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Locomotive, Tender and Passenger Car Springs of every description

Equalizing, Drawbar, Buffer and Spiral Springs of all kinds

Street Railway Springs from the largest to the smallest

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Car Windows
O. M Edwards.......Syracuse, N.Y.

Castings
Crossen Car Mfg. Co.......Cobourg, Ont.

Castings, Brass
Canadian Bronze Co.......Montreal.
Canadian Iron and Foundry Co.......Montreal.
Kerr Engine Co.......Walkerville, Ont.
St. Thomas Brass Co.......St. Thomas, Ont.

Castings, Iron
Canada Car Co., Ltd.......Montreal.
Canadian Iron and Foundry Co.......Montreal.
Kerr Engine Co.......Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co ..Mahwah, N.J.

Castings, Malleable
Taylor & Arnold.......Montreal.

Castings, Steel
Canadian Iron and Foundry Co.......Montreal.
Montreal Steel Works.......Montreal.
Rhodes Curry & Co.......Amherst, N.S.

Cast-Steel Hammers
American Brake Shoe & F'dry Co...Mahwah, N J.

Cast-Steel Track Tools
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cast-Steel Wrenches
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cement Machinery
Jas. W. Pyke & Co.......Montreal.

Chains
B J Coghlin & Co.......Montreal.

Charcoal Iron Staybolt Bars
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Clevis Nuts
Cleveland City Forge & Iron Co...Cleveland, O.

Coal Haulage Ropes
The B. Greening Co.......Hamilton, Ont.

Concrete Mixers and Rock Crushers
Canadian Fairbanks Co., Ltd.......Montreal.
F. H. Hopkins & Co.......Montreal.
Mussens Limited.......Montreal.
Toronto Pressed Steel Co.......Toronto.

Contractors' Plant
American Car and Equipment Co....Chicago, Ill.
M. Beatty & Sons.......Welland, Ont.
Canadian Fairbanks Co., Ltd.......Montreal.
J. T. Gardner.......Chicago, Ill.
F. H. Hopkins & Co.......Montreal.
The W. H. Kelson Co.......Montreal.
Kilgore-Peteler Co.......Minneapolis, Minn.
Mussens Limited.......Montreal.
Toronto Pressed Steel Co.......Toronto.

Contractors' Supplies
F. H. Hopkins & Co.......Montreal.
Rice Lewis & Son.......Toronto.
Toronto Pressed Steel Co.......Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.).......Montreal.

Cooking Apparatus
Geo. R. Prowse.......Montreal.

Copperware
Geo. R. Prowse.......Montreal.

Copying Presses
James Smart Mfg. Co.......Brockville, Ont.

Corrugated Furnaces
Continental Iron Works.......Brooklyn, N.Y.

Counter Dusters
Wolfe Brush Co.......Pittsburg, Pa.

Couplers, Car and Locomotive
Latrobe Steel & Coupler Co.....Philadelphia, Pa.
McConway & Torley Co.......Pittsburg, Pa.
National Malleable Castings Co...Cleveland, Ohio.
Washburn Steel Castings & Coupler Co.,
.......Minneapolis, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co.......Toronto.

Cross Arm Braces
Canadian General Electric Co.......Toronto.
Toronto Bolt and Forging Co.......Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co.......Toronto.

Crowbars
B. J. Coghlin & Co.......Montreal.
Toronto Bolt and Forging Co.......Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co, Hamilton.

Cuts
Acton Burrows Limited.......Toronto.

Derailing Devices
Hayes Track Appliance Co.......Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co.......Montreal.
The B. Greening Co.......Hamilton, Ont.

Derricks
M. Beatty & Sons.......Welland, Ont.
Miller Bros. & Toms.......Montreal.
Mussens Limited.......Montreal.

Dies
Butterfield & Co.......Rock Island, Que.

Diving Outfits
John Date.......Montreal.
Mussens Limited.......Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards.......Syracuse, N.Y.

Door Signs
Acton Burrows Limited.......Toronto.

Draft Gear
Cardwell Mfg. Co.......Chicago, Ill.
Farlow Draft Gear Co.......Baltimore, Md.
McCord & Co.......Chicago, Ill.
Standard Coupler Co.......New York City.

Drawing Materials
James Foster.......Toronto.

Dredges
M. Beatty & Sons.......Welland, Ont.

Drills
W. Abbott.......Montreal.

Drills, Twist
Baldwin Steel Co.......New York.

Dry Goods
The Hudson's Bay Co.......

Dump Cars (Contractors')
Canadian Fairbanks Co., Ltd.......Montreal.
F. H. Hopkins & Co.......Montreal.
Kilgore-Peteler Co.......Minneapolis, Minn.
Toronto Pressed Steel Co.......Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.).......Montreal.

Electric Car Route Signs
Acton Burrows Limited.......Toronto.

Electric Cranes
Babcock & Wilcox.......Montreal.
Canada Foundry Co.......Toronto.
Canadian Fairbanks Co., Ltd.......Montreal.
Dominion Bridge Co.......Montreal.
Mussens Limited.......Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co...Mahwah, N J.

Electrical Fuses
Standard Explosives Limited.......Montreal.

Enameled Iron Signs
Acton Burrows Limited.......Toronto.

Engineers' Supplies
Canadian Fairbanks Co.......Montreal.

Engines, Gasoline
Canadian Fairbanks Co.......Montreal.
Ontario Wind Engine and Pump Co.....Toronto.

Engines, Hoisting
M. Beatty & Sons.......Welland, Ont.
Canadian Fairbanks Co., Ltd.......Montreal.

Engines, Stationary and Marine
Polson Iron Works.......Toronto.

Explosives
Standard Explosives Limited.......Montreal.

Express Office Signs
Acton Burrows Limited.......Toronto.

Fencing
Banwell-Hoxie Fence Co.......Hamilton, Ont.
Canada Foundry Co.......Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Fire Brick
Mussens Limited.......Montreal.

Flags
The Hudson's Bay Co.......

Flour
The Hudson's Bay Co.......

Fog Signals
International Marine Signal Co.......Ottawa.

Forgings
Canada Car Co., Limited.......Montreal.
Cleveland City Forge & Iron Co...Cleveland, O.
Crossen Car Mfg. Co.......Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.
Standard Steel Works.......Philadelphia, Pa.

Fuse Batteries
Standard Explosives Limited.......Montreal.

Fuse Detonators
Standard Explosives Limited.......Montreal.

Gaskets
McCord & Co.......Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Gates
Banwell-Hoxie Fence Co.......Hamilton, Ont.
Canada Foundry Co.......Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Glue Brushes
Wolfe Brush Co.......Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co.......Chicago, Ill.

Groceries
The Hudson's Bay Company.......

Hammers
James Smart Mfg. Co.......Brockville, Ont.

Handcars
Canadian Fairbanks Co., Ltd.......Montreal.
Crossen Car Mfg. Co.......Cobourg, Ont.
F. H. Hopkins & Co.......Montreal.
Mussens Limited.......Montreal.
Rice Lewis & Son.......Toronto.
Toronto Pressed Steel Co.......Toronto.

Hardware
The Hudson's Bay Co.......
Rice Lewis & Son.......Toronto.

Headlights
The N. L. Piper Railway Supply Co.....Toronto.

Headlinings
Crossen Car Mfg. Co.......Cobourg. Ont.

Hoisting Machinery
Brown Hoisting Machinery Co....Cleveland, Ohio.
Canadian Fairbanks Co., Ltd.......Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hallow Staybolt Co..Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co.......Chicago, Ill.

Hydrants
Canadian Fairbanks Co., Ltd.......Montreal.
Kerr Engine Co.......Walkerville, Ont.

Illustrations
Acton Burrows Limited.......Toronto.

Inspections
R W. Hunt & Co.......Montreal.

Instruments, Surveying and Engineering
James Foster.......Toronto.

Interlocking Signals
Montreal Steel Works.......Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.

Iron, Bar
Taylor & Arnold.......Montreal.

Iron, Pig
Hamilton Steel & Iron Co., Ltd..Hamilton, Ont.

Iron Signs
Acton Burrows Limited.......Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Jacks
James Smart Mfg. Co.......Brockville, Ont.

Japans
McCaskill, Dougall & Co.......Montreal.

Journal Bearings
Canadian Bronze Co.......Montreal.
Crossen Car Mfg. Co.......Cobourg, Ont.
Kerr Engine Co.......Walkerville, Ont.
Jas W. Pyke & Co.......Montreal.
St. Thomas Brass Co.......St. Thomas, Ont.

Journal Boxes
N. J. Holden Co., Ltd.......Montreal.
McCord & Co.......Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co.......Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry.......Winnipeg.

Lamps, Incandescent
Canadian Westinghouse Co.......Hamilton. Ont.

Lamps and Lanterns
The Hudson's Bay Company.......
The Hiram L. Piper Co.......Montreal.
The N. L. Piper Railway Supply Co.....Toronto.

Launches
Polson Iron Works.......Toronto.

Lights, Contractors' and Wrecking
Canadian Fairbanks Co., Ltd.......Montreal.
F. H. Hopkins & Co.......Montreal.
Mussens Limited.......Montreal.

Locomotive Driver Brake Shoe
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.......Montreal.

Locomotive Lagging and Covering
Taylor & Arnold.......Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.......Kingston, Ont.
Montreal Locomotive Works (Ltd.)....Montreal.
H. K. Porter Co.......Pittsburg, Pa.

Locomotives (Geared)
Lima Locomotive Co.......Lima, O.

Locomotives (Electric)
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co.......Toronto.
Montreal Locomotive Works (Ltd.)....Montreal.

Locomotives (Logging)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.......Kingston, Ont.

Locomotives (Rack)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.........Kingston, Ont.
Montreal Locomotive Works (Ltd.)....Montreal.

Locomotives (Steam)
American Car & Equipment Co......Chicago, Ill.
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co....................Toronto.
Canadian Fairbanks Co., Ltd.........Montreal.
Canadian Locomotive Co.........Kingston, Ont.
J. T. Gardner.......................Chicago, Ill.
Hotchkiss, Blue & Co...............Chicago, Ill.
The W. H. Kelson Co.................Montreal.
Lima Locomotive Co......................Lima, O.
Montreal Locomotive Works (Ltd.)....Montreal.
H. K. Porter Co..................Pittsburg, Pa.
Vulcan Iron Works............Wilkesbarre, Pa.

Locomotive Staybolts
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.
Flannery Bolt Co.................Pittsburg, Pa.

Lubricators
McCord & Co.......................Chicago, Ill.
Taylor & Arnold.......................Montreal.

Machine Tools
W. Abbott...............................Montreal.
Canadian Fairbanks Co...............Montreal.

Machinery, Power
Jno. McDougall,Caledonian IronWorks Co.Montreal

Machinery Special
Miller Bros. & Toms....................Montreal.

Machinery, Transmission
Canadian Fairbanks Co., Ltd.........Montreal.
Miller Bros. & Toms....................Montreal.

Manganese Steel Castings
Montreal Steel Works..................Montreal.

Manhole Frames and Covers
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Marine Supplies
Rice Lewis & Son.......................Toronto.

Milepost Numbers
Acton Burrows Limited.................Toronto.

Milling Cutters
W. Abbott...............................Montreal.
Baldwin Steel Co.....................New York.

Motors
McCord & Co.......................Chicago, Ill.

Nickel
The Orford Copper Co.................New York.

Nickel for Nickel Steel
The Orford Copper Co.................New York.

Numbers
Acton Burrows Limited.................Toronto.

Nut Locks
Dunning & Eckenstein.................Montreal.
Positive Lock Washer Co.......... Newark, N.J.

Nuts, Square and Hexagon
Canada Foundry Co.....................Toronto.
Toronto Bolt and Forging Co..........Toronto.

Oakum
The Hudson's Bay Company...................

Office Fittings
Canadian Office & School Furniture Co., Preston, Ont.

Office Signs
Acton Burrows Limited.................Toronto.

Oil Furnaces
Railway Materials Co..........New York City.

Oil Tank
S. F. Bowser & Co. Limited... ....Toronto.

Oils
Canadian Oil Co.........................Toronto.
Galena Signal Oil Co.. Franklin, Pa., and Toronto.

Packing
Canadian Fairbanks Co., Ltd.........Montreal.
The N. L. Piper Railway Supply Co....Toronto.

Paint Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Paints
Canadian Oil Co.........................Toronto.

Pictorial Post Cards
Valentine & Sons Publishing Co........Montreal.

Pinch Bars
The N. L. Piper Railway Supply Co....Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co..New York.

Pipe Stocks
Butterfield & Co.............Rock Island, Que.

Platforms, Steel
Standard Coupler Co............New York City.

Ploughs, Contractors'
Mussens Limited.......................Montreal.
Toronto Pressed Steel Co..............Toronto.

Pneumatic Tools
N. J. Holden Co., Ltd.................Montreal.

Porter
E. L. Drewry........................Winnipeg.

Portable Boilers
Babcock & Wilcox (Ltd.).............Montreal.

Printing
The Hunter-Rose Co....................Toronto.
The Mail Job Printing Company........Toronto.

Pumps
S. F. Bowser & Co., Limited...........Toronto.
Canadian Fairbanks Co...............Montreal.
Canada Foundry Co.....................Toronto.
Ontario Wind Engine and Pump Co....Toronto.
James Smart Mfg. Co...........Brockville, Ont.

Pumps (Centrifugal)
M Beatty & Sons...............Welland, Ont.

Rail Benders, Roller
F. H. Hopkins & Co....................Montreal.
Montreal Steel Works..................Montreal.

Rails (new)
Dominion Iron & Steel Co..........Sydney, N.S.
Drummond. McCall & Co...............Montreal.
J. T. Gardner......................Chicago, Ill.
J. J. Gartshore..........................Toronto.
F. H. Hopkins & Co....................Montreal.
Kilgore-Peteler Co.......... Minneapolis, Minn.

Rails (for relaying)
F. H. Hopkins & Co....................Montreal.
J. J. Gartshore..........................Toronto.
Mussens Limited.......................Montreal.
Jas. W. Pyke & Co.....................Montreal.

Rail Joints
The Rail Joint Co. of Canada ....Montreal.

Railway Pile Drivers
F. H. Hopkins & Co....................Montreal.
Mussens Limited.......................Montreal.

Railway Supplies
Canadian Fairbanks Co...............Montreal.
The W. H. Kelson Co..................Montreal.
The Hiram L. Piper Co................Montreal.
The N. L. Piper Railway Supply Co....Toronto.
Rice Lewis & Son.......................Toronto.

Reamers
W. Abbott...............................Montreal.
Baldwin Steel Co.....................New York.
Butterfield & Co.............Rock Island, Que.

Refrigerators
Geo. R. Prowse........................Montreal.

Rivets, Boiler, Bridge and Structural
Toronto Bolt and Forging Co..........Toronto.

Rolled Wheels
Standard Steel Works........Philadelphia, Pa.

Roof Trusses
Canadian Bridge Co.............Walkeville, Ont.
Dominion Bridge Co...................Montreal.

Rope
F. H. Hopkins & Co. ....Montreal.
The Hudson's Bay Co.............................

Rotary Snow Ploughs
Crossen Car Mfg. Co.............Cobourg, Ont.

Sash Balances
O. M. Edwards.................Syracuse, N.Y.

Sash Locks
O. M Edwards.................Syracuse, N.Y.

Saw Steel
Montreal Steel Works..................Montreal.

Scoria Blocks
W. H. Knowlton.........................Toronto.

Scrapers (Wheel and Drag)
Bechtels Limited..................Waterloo, Ont.
F. H. Hopkins & Co....................Montreal.
Mussens Limited.......................Montreal.
Toronto Pressed Steel Co..............Toronto.

Screw Plates
Butterfield & Co.............Rock Island, Que.

Screws, Coach and Lag
Toronto Bolt and Forging Co..........Toronto.

Semaphore Arms
Acton Burrows Limited.................Toronto.

Semaphores
The N. L. Piper Railway Supply Co....Toronto.

Sewer Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Shade Rollers
O. M. Edwards.................Syracuse, N.Y.

Shafting, Hollow
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Shaking Grates
Babcock & Wilcox (Ltd.).............Montreal.

BABCOCK & WILCOX
LIMITED

PATENT WATER-TUBE BOILERS
(Over 6,000,000 H.P. in use)

FOR MARINE AND STATIONARY PURPOSES

This cut shews H.M.S. "Dominion," in which are installed sixteen "B. & W." boilers—these are the standard adopted by the British Admiralty.

HEAD OFFICE FOR CANADA, 11 Place d'Armes, MONTREAL

BRANCH—TRADERS BANK BUILDING, TORONTO

UNE
ST.

SUPPLEMENT TO THE RAILWAY AND MARINE WORLD
TORONTO, JUNE, 1908.

CANADIAN NORTHERN R.R. & GRAND TRUNK PACIFIC R.R.
PROPOSED TRACK LAYOUT FOR UNION PASSENGER STATION & LOCAL FREIGHT YARD.
WINNIPEG, MANITOBA.

SCALE 1 INCH=50 FT. NEW YORK MAY 1st 1908.

WARREN & WETMORE
3 EAST 33rd ST. NEW YORK CITY

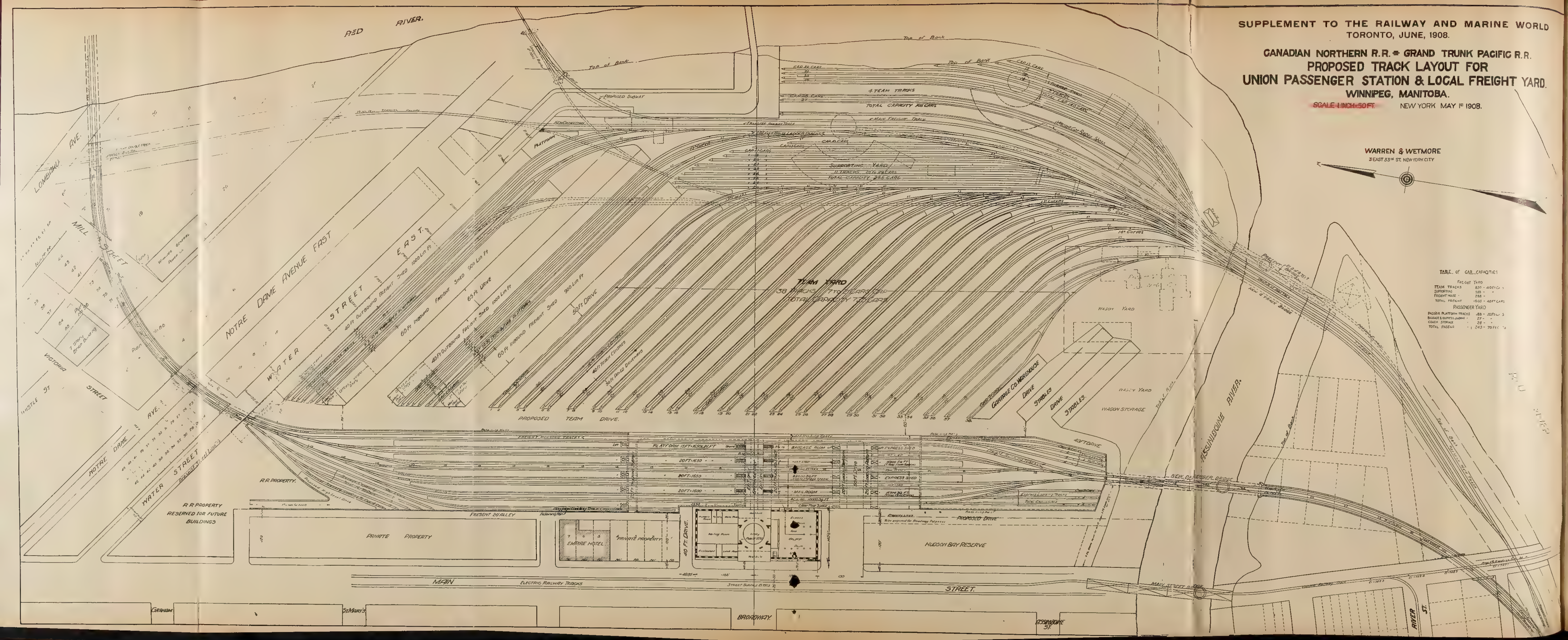


TABLE OF CAR CAPACITIES

FREIGHT YARD		
TEAM TRACKS	850 -	40 Ft Cars
SUPPORTING	365 -	"
FREIGHT HOUSE	288 -	"
TOTAL FREIGHT	1503 -	40 Ft CARS
PASSENGER YARD		
PASS'GR PLATFORM TRACKS	188 -	70 Ft Cars
BAGGAGE & EXPRESS LOADING	27 -	"
COACH STORAGE	28 -	"
TOTAL PASS'GR	243 -	70 Ft Cars

See Purchasing Agents' Guide on page 453

See Alphabetical Index to Advertisements on page 419.

THE
Railway and Marine World
With which are incorporated The Western World and
The Railway and Shipping World, Established 1890
Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph,
Telephone and Contractors' interests

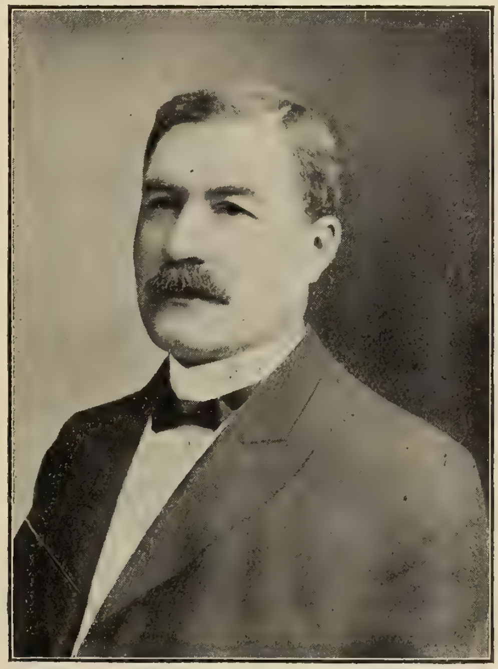
Old Series, No. 206.
New Series, No. 124.
TORONTO, CANADA, JUNE, 1908.
For Subscription Rates, See page 419.
Entered as second-class matter, March 5, 1908, at the Post Office at Buffalo, N.Y., under the act of Congress of March 3, 1879.

Winnipeg Union Station.

The union station and terminal yards which are to be constructed by the Canadian Northern Ry., for the joint use of itself and the G.T. Pacific Ry., at Winnipeg, will occupy about 70 acres of ground, located very close to the centre of the city, and bounded by Water St. on the north, Main St. on the west, the Assiniboine River on the south, and the Red River on the east. On this site was originally located old Fort Garry, built in 1812 to protect the trading post previously established by the Hudson's Bay Company, and which was the original settlement of the city.

THE PASSENGER STATION BUILDING will, as shown on the accompanying plan, be located on Main St., directly opposite Broadway, and will be an imposing structure, built entirely of stone, having a length of 350 ft. along Main St., and a width of 140 ft. The height of the larger portion of the building will be four stories and basement, with an elaborate central portion, having great arched windows on all four sides, and surmounted by a massive dome 100 ft. high above street level. The centre of this dome will be directly opposite the centre of Broadway. The main entrance will be off Main St., at centre of building, beneath a great stone arch, having massive stone columns on either side projecting 10 ft. beyond the building walls. The main floor will be at the street level, and will be devoted entirely to station facilities.

The main floor plan, as finally adopted, for convenience to passengers, and facility of operation, represents the highest type of modern passenger station design. Passengers going through the main entrance will pass through a vestibule and arrive directly into the ticket lobby, which will be a clear circular space 90 ft. in diameter, entirely unobstructed by columns, seats or booths of any kind. This lobby will be directly beneath the great dome and will be exceptionally well lighted by the great arched windows, one on each of the four sides. On the east and west sides these windows will open through to the front and rear walls of the building, and on the north and south sides will open directly out on the large open courts. The lobby will be surrounded on the first story by balconies overlooking the main floor. These balconies will run between the great arched ribs, which, rising from the main floor, will taper away to the summit of the dome. The ticket booths will be arranged on south side of lobby, and passengers after purchasing tickets will go directly to baggage checking counter at rear of booths. They may then pass out from lobby through rear vestibule direct to subway under tracks, from which ample stairways will lead up to the train shed platforms overhead. On the north side of ticket lobby space will be provided in each corner for telephone and telegraph booths and newspaper and book stands. Passengers who must wait for trains may pass through north side of ticket lobby into waiting room, which has an area of 9,000 sq. ft. By this arrangement of having the waiting room adjoining and separate from ticket lobby, a quiet and orderly waiting room will be assured, as all passengers going to and from trains may pass directly through the unobstructed ticket lobby without entering waiting room. The confusion incident to having both moving and waiting passengers together will be effectually prevented by this arrangement.



JAMES PITT MABEE
Chief Railway Commissioner for Canada

Adjoining the waiting room on the west side and facing on Main St. will be the lunch room, area 1,300 sq. ft., also the restaurant, area 2,200 sq. ft. Both of these rooms will have a separate entrance off Main St., so that they will be capable of handling local business direct. Adjoining the waiting room on the east side will be the men's waiting room, area 1,800 sq. ft., and the women's waiting room, area 1,800 sq. ft., each provided with toilets and wash stands. On the north side of waiting room an exit will be provided to a 50 ft. street on private property, which may be used exclusively for carriages. The central portion of the waiting room will be covered over by an arched skylight 40 ft. wide by 100 ft. long, above which will be an open court, thus providing the waiting room with excellent light. A special feature has been made of the construction of these skylights. They will be composed of vault light in panels and made absolutely watertight, which, in a region of heavy snowfalls and extremes of temperature will prevent the annoying leaks and draughts incident to large skylights of ordinary construction in this climate.

The walls of waiting room will be embellished with the coat of arms of each of the various provinces of the Dominion, executed in gold leaf and colors. The seats in this room will be heavy oak benches of the movable type, these being generally considered as the most desirable for station purposes. Arranged around the waiting room there will be the usual concessionary booths for the sale of cigars, candy, souvenirs, etc. The interior of waiting room and ticket lobby will have the effect of stone construction throughout, the wainscotting being of marble 6 ft. high, and the floors of terrazzo. This construction will give not only a very attractive appearance to the rooms, but will have the advantage of being sanitary and readily cleaned. All stairways will be of iron with marble treads.

The entire south wing of the main floor will be occupied by the baggage room, area 8,000 sq. ft., and the express room, area 8,000 sq. ft. In the future, when more space is required, both the baggage and express will occupy space beneath the tracks and platforms adjoining rear of building, as shown by the track layout plans, and as described further on. The space at first occupied by them in the building may then be used for additional waiting room space, if considered desirable at that time, or for other station purposes. The central portion of this wing will be covered by an arched skylight similar to that over the waiting room in the north wing, there being an open court in the interior of this wing also. A driveway for baggage and express waggons will be provided at the south end of building. The level of this driveway will be 3 ft. 6 in. below level of main floor, and will be reached by a short 5% grade down from Main St. The waggons will be loaded and unloaded on an 8 ft. platform outside of building wall, which will span the basement area away below. The baggage and express will be handled by hand trucks between the building and the train platforms, through trucking subways beneath train sheds, and by electric elevators from subways to each platform at either end of train shed.

The basement floor will be 15 ft. below the level of Main St. The entire north wing

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CHARLES MILLER,

PRESIDENT.

of this floor will be devoted to immigrants. There will be a waiting room, area 10,000 sq. ft., having a lunch counter on the north side, and a laundry and separate men's and women's bathrooms on the east side. Adjoining the waiting room on the south side will be a separate men's smoking room, with toilets, area 3,000 sq. ft., also a women's waiting room with toilets, area 3,000 sq. ft. The immigrants will be conducted to and from waiting room and trains by means of a stairway at rear of building, leading direct from basement to passenger subway. A separate immigrants' entrance off Main St. will be provided leading down from street to basement, partly by a stairway and partly by ramp. It will therefore be seen that immigrants will be well provided for, and will be handled to and from both trains and the street without coming into contact with other passengers.

In the north wing of basement floor, at the south-west corner, a barber shop will be provided, area 1,300 sq. ft., which can be reached by stairways from both Main St. and the main vestibule of building. The remainder of the west side of wing will be occupied by the kitchen, area 6,000 sq. ft., which will supply the restaurant and luncheon rooms directly overhead. The remainder of this wing will be occupied by the boiler and engine rooms, also heating and ventilating apparatus. There will be four boilers of 130 h.p. each, provided for heating purposes. Under the central portion of building, the basement floor will be used for storage of sleeping and dining car supplies, and miscellaneous storage purposes. The basement will be surrounded on all four sides by an open areaway 10 ft. wide, which will supply light and air to the basement rooms.

The second, third and fourth floors will be occupied entirely by the local and general Western Offices of the Canadian Northern, the G.T. Pacific, and the National Transcontinental Railways. These offices will be on either side of a corridor, the interior row of offices in each wing facing on the open court. Each floor will provide an available office space of 25,000 sq. ft., exclusive of corridors, stairways, elevators and toilets. Provision has been made in the design of foundations and steel structure for the future addition of five office floors, so that the building will then be capable of providing 200,000 sq. ft. of available office space.

The building is so designed that there will be no necessity for artificial lighting in any portion during the day. The electric lighting of the main floor has been artistically arranged. In the ticket lobby the lamps for the greater part will be concealed, the interior of the vast dome being illuminated by the brilliant reflected light from these invisible lamps. In addition, there will be a large chandelier containing 150 lights, suspended above the centre of lobby. A special feature has been made of the heating and ventilating layout. The heat will be supplied by hot water system, using the indirect method on the main floor, and the direct method on the office floors.

The structure of the building will be of the steel skeleton type. The column loads will be supported at the foundations by concrete piles, each pile designed to carry a load of 40 tons. The character of the soil at the site is the blue clay common to Winnipeg, the supporting power of which cannot be relied upon to sustain a greater load than 3,000 lbs. to the square foot. The use of concrete piles will be necessary, owing to the fact that they will lie between the high and low water lines of the Assiniboine River, which is about 1,000 ft. from the building site. The stone used in the construction of the façades will be either Indiana limestone or the native Tyndall Manitoba stone.

In the space allowed for the various rooms of the station, and also in the design of passenger track layout, ample provision has been made for the probable rapid growth of Winnipeg, and the consequent increase of requisite station facilities and traffic. The architects believe that the station as designed will meet all demands that will be made upon it for many years. In this they have profited by the experience of the C.P.R. station at Winnipeg, which, though completed less than three years, has already been outgrown by the city, being now hardly adequate to handle the traffic presented during the busy periods.

Passenger Yard and Train Shed.—The track layout for both the passenger and freight yards, as shown on the accompanying plan, was developed after much study by the engineers and other officials of both railway companies in co-operation with the architects. Several preliminary layout plans showing the various types of passenger terminals were made and studied. It was finally decided that a layout of the through station type, with approach tracks elevated over the intersecting streets, and with tracks raised sufficiently above main floor of station to allow a passenger entrance subway beneath, was the most desirable, giving the greatest operating efficiency for the present and prospective traffic to be handled at Winnipeg, as well as providing the greatest convenience to passengers.

A Much Appreciated Tribute.

Toronto, May 8, 1908

To the Editor of The Railway
and Marine World.

Dear Sir,—It has often been on my mind, when the regular issue of your journal has come to hand, that I should write you to express my appreciation of a publication containing such an amount of most interesting information in respect to the matters which naturally come under the scope of your journal. Not only the amount, but also the accuracy of the information, so far as I can judge, is equally remarkable.

No one, directly or indirectly interested in such matters, who is at all desirous of being up-to-date, can afford to be without your journal. I should soon be out of touch with many matters of interest but for the information I get from this source.

Yours truly,

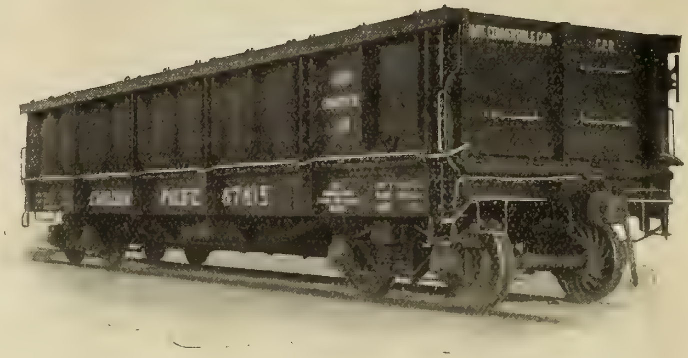
H. P. DWIGHT,
President Great Northwestern Telegraph Co.

The accompanying plan shows the maximum development of the passenger terminal layout, which will consist of eight through passenger tracks, with adjacent platforms, and two separate open running tracks at rear for through freight trains. The platforms will be 20 ft. wide, and can be made 1,650 ft. long. By means of this great length, and by the use of the double cross-overs, each track will be capable of handling two trains of 11 cars each during periods of heavy traffic. The total capacity of platforms will be 200 70 ft. cars. The platforms will be of reinforced concrete construction raised 12 ins. above base of rail. Between each pair of tracks there will be three lines of pipe for water, steam and gas. Passengers going to trains will pass from rear of ticket lobby into a 50 ft. wide subway, with head room of 10 ft., having 7 ft. wide stairways on each side, leading up to each platform. This subway will be so arranged by means of railings and gates that there will be no interference between passengers going to trains with those coming from trains. The subway will be heated in winter from the building. The elevation of tracks over the subway will be 10 ft. above level of main floor of station. A slight ramp down from rear of ticket lobby to floor of subway will allow a clear head room of 10 ft.

As already described, the baggage and express business will be handled for the present in the south wing of station building. In the future, however, these facilities will occupy space beneath the tracks, as shown on the plan, the tracks being carried overhead by steel viaduct construction. The south wing of station need then contain only a baggage checking counter for the convenience of passengers, with pneumatic tube connection with baggage room. The remainder of this wing will be used for any other station purpose desired. All the sheds beneath tracks will have a clear head room of 10 ft. They will be approached from a 50 ft. driveway, 3 ft. 6 in. below floor of sheds, with a 4% grade down from Main St., south of station building. On the south side of this driveway will be the express sheds, one for each road, with an available floor space of 15,000 sq. ft. in each shed. On the north side will be the baggage room, with an available floor space of 20,000 sq. ft., also the mail room, with 10,000 sq. ft. On both the express and baggage sides of drive there will be a row of electric elevators, one to each platform. These lifts will supply all trains departing for the west and south, and arriving from the east. The fact that the largest portion of all express business handled at Winnipeg arrives from the east and departs to the west, determined the location of sheds on this side of train shed. To supply the east-bound departing trains and the west-bound arriving trains, the baggage and express will be handled through a 15 ft. trucking subway at rear of train shed to a row of elevators on north side of train shed. By these arrangements there will be no necessity for trucking of any kind being done on the train platforms, thereby affording the passengers the unobstructed use of the platforms, and avoiding all interference and confusion. This system of handling baggage, express and mail beneath tracks, with elevators to each platform, is in successful operation at some of the largest and most modern passenger terminals in the U.S., notably the union station at St. Louis, the Rock Island station at Chicago, the union station at Washington, D.C., and the Pennsylvania Ry. station at Pittsburg. Similar systems of baggage and express handling are also successfully used in many of the large railway terminals in Europe

Approaches to Passenger Terminal.—The west approach will start from the present main track on the north bank of the Red River about 2,000 ft. west of Main St., and descending on an earth embankment at a maximum ruling gradient of 0.4%, will pass over Main St. on a double track plate girder bridge, allowing an underclearance of 14 ft. for the street roadway. It will then cross the Assiniboine River on a new double track steel truss bridge 400 ft. long, one span of which will be a swing bridge, as required by the Dominion Government. The east approach will start from the present main line, near St. Boniface station, and rising on an earth embankment, with the ruling 0.4% gradient, to the Red River, which it will cross on a new double track steel truss bridge 900 ft. long, containing one draw span, as required by the Government. It will then cross, on steel plate

The New Hart Convertible Cars for the Canadian Pacific Railway



50 Ton Car with Steel Underframe, Steel Stakes, Steel Side Plates and Steel Hopper.

The Hart-Otis Car Company have recently designed and are having built for the Canadian Pacific Railway, 400 of their latest Hart Convertible Cars, which are without a doubt the strongest and most efficient cars that have ever been built for ballast and construction work. Realizing the advantage of having this class of equipment strong enough to withstand the severe strain that construction or ballast work places upon cars, it was decided to spare no expense in getting up this design, and that they have succeeded will no doubt be admitted by any impartial critic who will carefully examine these cars.

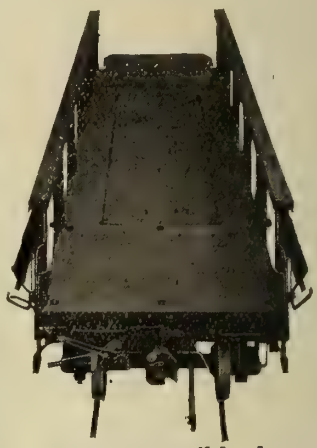
The cars have a cubic capacity of 40 yards, when loaded as a centre dump hopper car for ballasting, and of 58 yards when used as a level floor side dump gondola car.

The length of the car is	36′ 10″ between end sills and 38′ 4″ over buffers.
The length inside is	35′ 0″ as a gondola. 21′ 6″ as a hopper ballast car.
Width inside..............	8′ 8″
Height inside	4′ 2½″
Height from top of rail to top of car	8′ 6½″

The centre hopper door is made of steel built-up sections and has a full opening of 24 inches, by the length of the bottom of the hopper which is 18′1″.

When working these cars in centre ballast service the man operating the car absolutely controls the opening of the hopper door, by means of an escapement lever which allows the door to open about one inch at a time. This controls the flow of ballast from the car into the centre of the track, so that the operator can dump as little or as much in the track as desired.

When the car is used as a side dump, with convertible floor doors turned down and arranged for pulling a top plow over the car, the side doors have an opening of about 6′6″ x 3′8″. It will thus be seen that the largest possible stone that could be loaded with a steam shovel can be put through these door openings. While we do not advocate loading boulders into a car of this type, accidents will happen and the car was designed with this in view.



The floor of the car is composed of 2¼″ tongue and grooved pine flooring. The convertible doors are composed of 2½″ long leaf southern pine planking shiplapped. The side doors and end gates are made of 2″ Norway pine planking. All other parts of the car are steel construction.

This car also embodies our latest improved hand brake arrangement, which is especially designed for cars of this type, the object being to bring all parts of the hand brake below the top of the side of the car, so as to keep the top of car cleared from all obstruction for steam shovel loading.

There are many minor improvements that have been made on this car, which will be appreciated by those using the cars.

THE HART-OTIS CAR CO., LIMITED, MONTREAL

Successors to Dominion DUMP CAR Company, Limited

girder bridges, the Winnipeg Transfer Ry., Mill St., Notre Dame Ave., and Water St. Each of the street roadways will have at least 14 ft. clear head room. The proposed base of rail will be practically level from the Red River bridge to the Assiniboine River bridge, at elevation 766.0, which is approximately 10 ft. above the level of Main St. At each end of the passenger layout there will be a signal tower located as shown on the plan, from which all signals, switches and crossovers will be controlled. The electro-pneumatic system of interlocking will be used. All track work will be of first-class construction, with 80 lb. rails and gravel ballast. While the Government requires all bridges across either the Red or Assiniboine Rivers to contain draw spans, these rivers are not navigable at the present time for any but small boats, and the draw spans are open only a very few times in the course of a year, but on the completion of the St. Andrew's locks below Winnipeg, there will doubtless be a considerable increase in the navigation of the Red River.

Local Freight Yards and Freight Sheds.—The problem of obtaining a layout for local freight delivery yards and freight sheds to give sufficiently large team track capacity, long freight sheds, and equal facilities for each road, and allowing greatest accessibility for teaming, as well as one that could be properly worked by switching, was complicated by the peculiar shape and conditions of the ground layout, and by the fact that the throat of the yard had to be located on a bridge across the Assiniboine River. The final layout of freight sheds, team tracks and supporting tracks, gives the greatest car capacity, as well as the greatest facility of operation and access to team hauling, of several tentative layouts which were drawn and studied.

The Team Yard will contain 42 tracks, with a total capacity of 830 40-ft. freight cars. The switching leads to team yard will be divided by cross-overs into three separate portions, each controlling 13 tracks, so that three switching locomotives may be worked at the same time. The usual length of team tracks will be 800 lineal ft., with a capacity of 20 cars each. The team driveways will be of stone block construction on a 6 in. concrete base. This construction is made necessary by the treacherous character of the clay soil, which, when wet, will heave and swell, causing an ordinary light pavement to break and disintegrate. The driveways will be 30 ft. wide between curbs, the opposite tracks being 40 ft. centres across the driveways. Adjacent pairs of team tracks will be on 12 ft. centres. Tapping the ends of these driveways will be a paved avenue from 60 to 70 ft. wide, running the full length of the yard. This avenue will be accessible from Water St. on the north, passing beneath the bridge carrying the east approach overhead, and from Main St. near the Norwood bridge on the south, passing beneath the south approach.

The surface drainage from all the driveways will be by means of gutters along each side of each driveway, ending at catch basins located at ends of driveways on each side of the wide avenue. These catch basins will discharge into a line of vitrified tile pipe running beneath the wide drive, and discharging into the Assiniboine River.

The Freight Shed Layout will consist of two equal sets of inbound and outbound sheds, one set for each road. The outbound sheds will be 40 by 1,000 ft., each served by four tracks. The inbound sheds will be 60 by 900 ft., each served by two tracks. Between these inbound and outbound tracks will be a 10 ft. transfer trucking platform. Each road will therefore have a freight shed track capacity of 144 40-ft. cars. The freight sheds will be one storey high, having steel columns and roof trusses, with sliding doors on both the track and team sides, so that any portion of the shed may be opened. Above the doors will be a transom of wire glass. The roofs will be of tin. Floors will be of concrete laid on a compacted cinder fill.

At the ends of the freight sheds, adjacent to the wide avenue, ample provision has been made for the freight offices. These will contain 15,000 sq. ft. of available office space for each road, and will be in the second storey above main floor of shed. A bridge 40 ft. wide at the level of these office floors will span the six intermediate tracks, and connect the outbound and inbound sheds. The freight agent's office will be located in this bridge, where he can view the loading and unloading of cars. The switching leads to freight sheds will be of such length that the tracks may be switched without the switch engine having to cross the bridge at throat of yard. The supporting yard will have a total capacity of 385 cars. This yard will be for the reception and storage of arriving trains of loaded cars to be switched into team yard and for departing trains of empty cars which have been switched out from team tracks. This layout of team and supporting tracks and freight houses will be one of the largest local freight delivery yards in existence. A connection will be maintained with the present Winnipeg Transfer Ry. track, along which are located numerous industrial sidings, and over which cars for transfer with the C.P.R. are handled. This connection will pass beneath the east approach near Lombard Ave.

The present main track crosses the Assiniboine River on a wooden drawbridge, which will be replaced in the new scheme by a steel four-track rolling lift bridge having two separately operated leaves. The Red River is crossed by the present main track on a comparatively new steel truss bridge, the shore span of which is shown at the span near the foot of Water St. This bridge will be maintained for the proposed new layout, and used mostly by the G.T. Pacific Ry. trains, for local freight running between this terminal and that company's general freight yard located about three miles east, as noted further on. The adjacent shore span will need to be reconstructed to meet the change in alignment of running track as shown. This track will pass over the east end of Water St. on a plate girder bridge, the street being somewhat depressed to pass under. The driveway across the Broadway bridge over Red River will be maintained as at present. The west approach to freight yard will use the same line and be at the same level as the present main track. The length of all switching leads for each part of the freight yards is such that no switching whatever will be done across Main St. The only traffic across this street will be that of trains of local freight between this terminal and the Canadian Northern Ry. general freight yards, one mile west, as noted further on. All the through freight trains for both roads will be run on the proposed new overhead line, passing around rear of train shed on the two open running tracks provided for that purpose.

At the north end of the new Assiniboine River bridge there will be located a signal tower, from which will be controlled, by electro-pneumatic system of inter-locking, all the signals, switches and cross-overs of the tracks entering the bridge. The sharpest curves used in the layout are 14° radius 410 ft. The frogs used are mostly no. 7, with no. 10 for main track connections and main cross-overs. The track construction in freight yards will have 60 lb. rails and gravel ballast.

As the railway companies will each have its own cartage company to handle all trucking from freight sheds, as well as a large amount from the team yard, there will be provided, adjacent to the team yard, two stable buildings, each to accommodate 200 horses. The buildings will be of brick construction two stories high, the upper floor being used for feed and harness storage. A cartage company warehouse of brick construction will also be provided for the storage of freight not claimed by consignee within a reasonable length of time.

Each of the joint railways will use its own passenger coach yards, locomotive houses and shops, in conjunction with these terminals. Those for the Canadian Northern Ry. have recently been constructed about a mile west of the new station, and those for the G.T. Pacific Ry. are now being constructed about three miles east of this station. The general receiving, distribution and forwarding freight yards of each road are also located at the above points.

Due to the inevitable future development of the great fertile northwestern portion of Canada, Winnipeg will undoubtedly in time occupy the same important position as the railway centre of Canada, that Chicago now occupies as the railway centre of the United States. The officials of the joint railways and the architects have made this fact the leading consideration in the layout and design of both passenger and freight terminals. The plans have been so drawn that the above described grand scheme of operation may be realized in the ultimate development, but necessitating the initial construction of only that portion necessary to handle the traffic presented by the requirements of the present and immediate future. The railway officials who co-operated for the construction of these joint terminals, and who personally rendered valuable assistance to the architects in their work of designing the terminals, are: Wm. Mackenzie, President; D. D. Mann, Vice-President; and M. H. McLeod, General Manager, of the Canadian Northern Ry.; C. M. Hays, President; F. W. Morse, Vice-President and General Manager; and B. B. Kelliher, Chief Engineer, G. T. Pacific Ry. Warren and Wetmore, of New York City, are the architects who have had charge of the design, and who will supervise the construction of both the station building and the track layout of passenger and freight yards. This firm are specialists in railway terminal design, and have recently completed plans for the new Grand Central station in New York City for the New York Central and Hudson River Rd.

The agreement with respect to the construction of the terminals, which was ratified by the Dominion Parliament April, 1907, is made between the Canadian Northern Ry., the G.T. Pacific Ry., the King, by the Minister of Railways, and the Commissioners of the Transcontinental Railway. Under the agreement the Canadian Northern Ry. is to construct the buildings, tracks, telegraph lines, structures and facilities, necessary for the purposes of the carrying on of the traffic of the three railways having terminals in the station; and is also to keep the terminals equipped with all furniture, locomotives, plant tools, etc., required for its operation. The value of the lands, including yards, tracks, etc., but excluding buildings, is fixed at $2,625,000, and upon this amount the G.T. Pacific and the Government jointly will pay an amount equal to one-half of 4% per annum, and subject to certain provisions a sum equal to one-half of 4½% upon the expenditures made by the C.N.R., including the cost of the temporary additional tracks and facilities required during construction, prior to the G.T. Pacific Ry. becoming lessee and during the running of the lease of the Eastern Division of the Transcontinental Railway, and when the G.T. Pacific Ry. ceases to

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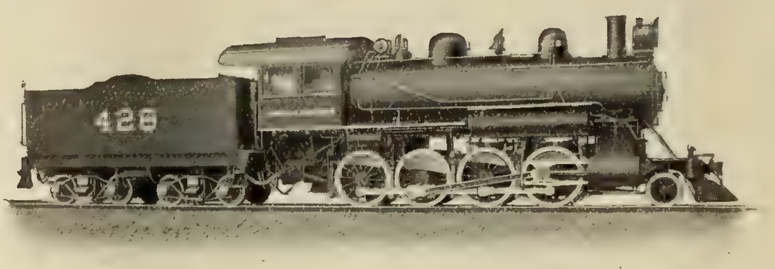

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operate the Eastern Division the G.T. Pacific Ry. and the Government shall each pay a sum equal to one-third of 4% upon the sum of $2,625,000 and one-third of 4½% upon the expenditures made on capital account. Provided always that before the construction of the building for the hotel and restaurant on the joint terminals has been commenced the Government may, by written notice, elect not to become interested in the said buildings or in the hotel and restaurant, and separate accounts of the expenditures thereon shall be kept, and these amounts shall not be included in the capital account as against the Government. The compensation shall be payable in monthly amounts as to the fixed value of the land, beginning Jan. 1, 1907, and the other percentages shall become payable as the progress payments are made. The terminals are to be in charge of a Terminal Board, consisting of one representative appointed by the G.T. Pacific Ry., during the continuance of the lease of the Eastern Division, and one representative appointed by the C.N.Ry., such board to be appointed as soon as the terminals are substantially ready for joint use and control. If the G.T. Pacific Ry. ceases to operate the Eastern Division of the line at the expiration of the lease the Terminals Board shall consist of two members appointed by the Canadian Northern Ry., and one each by the G.T. Pacific Ry. and the Government. The agreement fully defines the duties and responsibilities of the Board, and prescribes general rules for its guidance, and for the settlement of differences between the different interests involved. It is also provided that other companies may be granted terminal facilities upon such terms as may be arranged, and the Canadian Northern Ry. shall be entitled to receive one-half of such rentals and other consideration received.

Since the foregoing matter was put in type a contract has been let for the passenger station building, the location of which is shown on the accompanying plan, and an illustration of the Main St. elevator of which was given in our last issue. It has been decided to erect a building of basement and three stories instead of four as shown in our last month's illustration, but as previously stated provision has been made for adding up to six additional stories whenever they may be required. The contractors are Peter Lyall & Sons, Montreal, who were the lowest tenderers, the contract price being $886,000. This figure does not include furnishing, restaurant fixtures, etc., which will bring it up to about $925,000, nor does it include the interior furnishing of the two upper stories, which will probably cost $200,000 more. It is intended to start work at once, the contract calling for its completion by Oct. 1, 1909.

Telephone Dispatching on the C.P.R.—A press report stated recently that the C.P.R., as the result of investigations made into the system of train despatching on the Chicago, Burlington and Quincy Rd., was about to install an experimental system on similar lines between Montreal, Outremont and Farnham, about 49 miles, and it was said that the work will be in working order in June, and should it prove successful, the system might be gradually extended to the whole of the company's lines. We are officially advised that the company is building a telephone dispatching line between Montreal and Farnham, but that there will be no change in the system of moving trains, except that orders will be handled by telephone instead of telegraph. On the Port Burwell branch, Ontario Division, train orders have been handled by telephone for over three years.

G.T.R. Half-Yearly Meeting.

At the half-yearly meeting held in London, Eng., April 9, the President, Sir C. Rivers Wilson, after the presentation of the report published in our May issue, said, although the report was not as satisfactory as usual, due to the financial depression in the U.S., the unsatisfactory harvest and the severe weather, shareholders should be satisfied with the result of the operations for the half-year. This was merely, he thought, a temporary check. He hoped that about 1,000 miles of the G.T. Pacific Ry. would be completed by the end of 1908. It was proposed to acquire land in certain districts along the line, and bonds would be issued to shareholders on preferential terms in order to raise the necessary money. Much criticism had been hurled at the board and its management, but, in comparison with other railway corporations on the American continent, the G.T.R. system stood on the highest pinnacle, as far as economical expenditure, combined with efficiency, was concerned. There was absolutely no real reason for discouragement. Every year the company enjoyed an increase of income and traffic, and the present check was, he thought, but temporary. The G.T.R. shareholders had a very valuable asset in the new transcontinental railway, the G.T. Pacific, and in the very near future this would prove a source of great profit. He then proceeded to analyze the accounts for the half-year ended Dec. 31, 1907. These accounts showed that the last half-year was the richest half-year in the history of the company, both as regards gross revenue and net profits. The result of the half-year's working had been that the net traffic receipts had increased from £1,023,000 in the Dec. half of 1906 to £1,052,000 in the past half-year. The balance of the net revenue account for the half-year was £527,200, and, adding the sum brought forward, they arrived at the amount of £541,800 available for the payment of dividends. This was sufficient to pay the dividends for the half-year on the 4% guaranteed stock and on the first and second preference stocks, and a dividend of 3% for the year on the third preference stock. At the meeting in Oct. last, he ventured, very cautiously, to hold out some expectation that, in the event of their traffic receipts keeping up, the directors might be able, possibly, to improve upon a dividend of 3% on the third preference stock; but, as he had explained, the circumstances of the close of the half-year were very adverse, and it had consequently been impossible to realize the expectation referred to. Having referred to the successful completion of the electric installation at the St. Clair Tunnel, and the work being done on the G.T. Pacific Ry., and the Eastern Division of the National Transcontinental Ry., the President concluded by moving the adoption of the report, and authorizing the payment of the dividends recommended. A. W. Smithers, Vice-President, seconded the motion.

The report was adversely criticized by Messrs. Castello, Seal and Fairbairn, the last urging the importance of having some committee or representatives of the Board in Montreal, maintaining that no business could be effectively or properly managed 3,000 miles away. Mr. Bosher expressed himself as satisfied and hopeful of the future, and said the adoption of Mr. Fairbairn's suggestion would set up a rival board, it would lead to friction and be injurious to the real interests of the company.

The President, in reply, referred to the resignation of Hon. C. Rothschild from the directorate. This was necessary owing to Mr. Rothschild's personal business engagements preventing him giving the necessary time to attend Board meetings. The vacancy had been filled by the election of Mr. Glyn, of the banking house of Glyn, Mills, Currie & Co.

In regard to the suggestion that there should be a Canadian board, the President said: I am sorry I did not distinctly hear the gentleman who raised the question; but of all the insane proposals ever made by a set of responsible shareholders, I do not suppose that anything more insane than that was ever made. He does not know the history of the company. This company was managed, or rather mismanaged, in 1861 by a board in Canada, and in consequence of the mismanagement of that board we were brought into financial difficulties.

Mr. Seal: Pardon me, it did not exist then.

The President: I beg your ten thousand pardons. You do not know the history of your company. Prior to 1862 there was a board in Canada with a small committee in this country, and in consequence of the mismanagement of the Board in Canada, which brought disaster to this company, from which you are suffering even at the present day, and which had as a result the existence of the first preference, the second preference, and the third preference stocks. Under the conduct of those two eminent authorities, G. Glyn and T. Baring, who were the representatives in this country of the G.T.R., a committee was appointed, having as chairman Mr. Crawford, M.P. for London, and as Vice-Chairman, the well-known political economist, Mr. Newmarch. Upon their recommendation, an Act of Parliament was passed by which it was made possible to remove the board over here, and the board was so removed; and I venture to say it was a successful measure. Therefore, I say, according to all precedents, you fared very badly by having a board over there. I do not know whether Mr. Castello and Mr. Seal have ever been to America or know what American boards or meetings are?

Mr. Fairbairn: What about the C.P.R.?

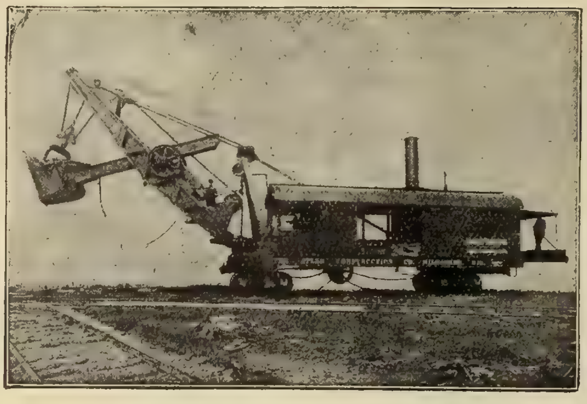
The President: I do not think that Mr. Castello spoke in favor of the establishment of a board in Canada, but I would ask what would be the result? You would have certainly your half-yearly meetings in Montreal, and Mr. Castello, no doubt, for the protection of his interests, and in order to air his grievances, would twice a year make a journey to Montreal, to attend these general meetings—general meetings consisting of a handful of paid officials and himself—because that is what it comes to. That would be one effect of our moving the board to the other side. I say that anyone who knows what the administration of boards is in America would know that you would have a mere bogus board, a phantom board. The company would pass out of the hands of the shareholders, and the control would pass into the hands of goodness knows who. I will go further than that, and say that if you were to announce to-morrow that by the decision of the shareholders the board was to be removed to Canada, it would be the most deadly blow to your credit. I say it would, and I am supported by a much higher authority than Mr. Seal or Mr. Castello.

Mr. Fairbairn remarked that what he intended to suggest was an advisory board in Canada, subsidiary to the Board in London.

The resolution was carried, Sir C. Rivers Wilson and J. A. Clutton-Brock were re-elected directors; F. Whinney, London, Eng., and C. Percy, Montreal, were re-elected auditors.

R. Newton, a C.P.R. brakeman, was sentenced to nine months' imprisonment, at the Milton, Ont., Assizes, for criminal negligence at Guelph Junction, Mar. 11, 1907, which resulted in the death of a locomotive engineer.

The Canadian Railway Club has offered a free scholarship, covering four years' tuition in the Faculty of Applied Science at McGill University, subject to competitive examination, open to sons of members of the Club under 21 years.



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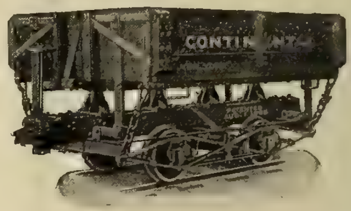

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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

4635. Mar. 27.—Amending order 4165, of Dec. 26, 1907, re location of Niagara, St. Catharines & Toronto Ry. in Brantford, Ont., from mileage 56.25 to 58.82.

4636. April 21. — Approving Canadian Northern Ontario Ry. location through McKellar and Hagerman tps., Ont., mileage 0 to 18, from Waubamik, northeasterly, to Whitestone Lake.

4637. April 22.—Approving G.T. Pacific Ry. revised location, from Surprise Lake, mileage 150, to junction with the National Transcontinental Ry., at Pelican Lake, mileage 199.56, Ont.

4638. April 22. — Authorizing Welland County Telephone Co. to place wires across G.T.R. at Rosehill station, Ont.

4639. April 22.—Authorizing Bell Telephone Co. to carry wires across G.T.R. at public crossing, 300 yards east of Waubashene station, Ont.

4640 to 4643. April 22. — Authorizing C.P.R. to reconstruct bridges 84.1, Toronto section, Ont.; 79.4 over Quartz Creek, Mountain section, B.C.; 93.9, Shuswap section, B.C., and 1.2, over Illecillewaet River, Arrow Lake branch, B.C.

4644. April 23. — Authorizing Canadian Copper Co. to place wires across North Shore Ry. Co., at Creighton Mine, Copper Cliff, Ont.

4645. April 24.—Authorizing C.P.R. to reconstruct bridges at 14 points in Alberta, British Columbia and Quebec.

4646. April 24.—Authorizing C.P.R. to build spur to the Maple Leaf Flour Mills, Kenora, Ont.

4647. April 24.—Authorizing C.P.R. to divert the highway in lot 33, concession 1.S, Bentick tp., Ont.

4648. April 24.—Authorizing Town of Sudbury to place electric light wires across C.P.R

4649 to 4651. April 24.—Authorizing Canadian Northern Ontario Ry. to open for the carriage of traffic the portions of its line from Sudbury Jct., north, to Moose Mountain, Ont., 27.74 miles; the portion of the Garson spur of its line from the Hutton branch to the Mond nickel mines, 3.6 miles; and the portion of its main line from the C.P.R. crossing near Romford, to Sudbury, Ont., 10.05 miles.

4652. April 24.—Amending order 4580, April 14, authorizing Brantford and Hamilton Electric Ry. Co. to erect electric power, trolley, and feeder wires over the C.P.R. Tillsonburg branch in Brantford, Ont.

4653. April 24.—Authorizing C.P.R. to construct and operate a spur line to J. Taylor's premises, Lethbridge, Alta.

4654. April 24.—Authorizing Dominion Natural Gas Co. to lay mains under G.T.R. tracks in Dunnville, Ont.

4655. April 9.—Authorizing C.P.R. to construct spur to Standard Brick and Tile Co.'s premises, Kildonan, Man.

4657. April 27.—Authorizing Bell Telephone Co. to erect wires across G.T.R. tracks at Orillia, Ont.

4658. April 28.—Authorizing British Columbia Copper Co. to construct pipe line under C.P.R. Motherlode branch at Greenwood B.C.

4659. Mar. 12.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to construct its railway along Pitt St., Windsor Ave., Strachan and Arthur Sts., Aylmer and Howard Aves., Windsor; along and across highways in tps. of Sandwich East and West; along the Talbot Road, Essex, and along Division and Main Sts., Kingsville, Ont.

4660. April 24.—Authorizing C.P.R. to construct a spur to J. Wilson's premises, Como, Que.

4661. April. 24.—Authorizing C.P.R. to construct a spur to Lake of the Woods Milling Co.'s premises, Keewatin, Ont.

4662. April 30.—Authorizing Wiechman and McIvor to erect an electric light line over the C.P.R. at Treherne, Man.

4663. April 24.—Ordering that the time within which the Canadian Freight Association will be permitted to file an answer to the application of the Morang Educational Co., Ltd., re fixing proper freight classification throughout Canada, be limited to four days from the date of the service upon it of the said application, and set down for hearing at the Board's sittings in Ottawa on May 5, 1908.

4664. April 14.—Authorizing Chatham, Wallaceburg and Lake Erie Ry. Co. to temporarily operate crossing at grade with the G.T.R. on William St., Chatham, Ont., pending installation of interlocking plant and derails.

4665. April 7.—Recommending to Governor-in-Council for approval Quebec Harbor Commissioners' by-law 105.

4666. April 29.—Authorizing C.P.R. to cross with its track the Canadian Northern Ry.'s spur to Bird's Hill gravel pit, sec. 16, tp. 11, range 4, Man.

4667. April 16.—Authorizing C.P.R. to construct its railway across road allowances at 126 points on its Pheasant Hills' branch, Sask.

4668, 4669. April 30.—Authorizing Toronto and Niagara Power Co. to erect its transmission wires across C.P R. north of Toronto Jct. and at Lambton Park, Ont.

4670. April 30.—Authorizing Madame P. H. Roy, for St. John's Water Works Co., to lay water pipe under G.T.R. at Allen St, St. John's, Que.

4671. April 30.—Approving deviation in the location of C.P.R. main line and double-track at Scovil, Ont., mileage 130 to 132.

4672. April 30.—Authorizing G.T. Pacific Ry. to cross with its tracks the Edmonton and Slave Lake Ry., sec. 15, tp. 53, range 25, west 4th mer., Edmonton district, Alberta.

4673. April 30.—Authorizing Norfolk and Tillsonburg Telephone Association to erect its wires across the C.P.R. near Eden, Ont.

4674 to 4676. April 30.—Approving deviation of C.P.R. main line and double track between Busteed and Deception, mileage 16 to 19.5 from Kenora, Ont.; between Snell and Hodge, mileage 113.2 to 114.90, new line, and mileage 113.2 to 114.83, old line, from Ignace, Ont.; and between Edison pine, mileage 99.4 to 109.9, old line, and mileage 99.4 to 110.4, new line, from Ignace, Ont.

4677, 4678. April 30.—Authorizing New Brunswick Telephone Co. to erect its wires across C.P.R. at Raymond's house, near Woodstock, N.B., and at Moore's Mills, N.B.

4679. April 30.—Authorizing Consumers' Gas Co., Toronto, to lay a pipe under C.P.R. on Dovercourt Road, Toronto.

4680. May 7.—Ordering that Canadian Classification 13 be amended by the addition of a carload rating of third class on books in boxes or cases, item 30, pg. 12, and that the amendment become effective not later than May 20, 1908.

4681. May 7.—Authorizing Southwestern Traction Co. to erect transmission wires across G.T.R. about a mile north of St. Thomas, at Lynhurst Rd., Ont.

4682. May 5.—Ordering that the I.C.R. and G.T.R. be absolved from agreement with the C.P.R. re rates to Fredericton, N.B., on traffic from points west of Montreal, which were raised from 2½c. to 8c. per 100 lbs.

4683. May 1.—Authorizing Corporation of Aylmer, Ont., to lay water main under Canada Southern Ry. in Aylmer, Ont.

4684. May 7. — Approving maximum freight tariff of Klondike Mines Ry. submitted for approval of Governor-in-Council April 21, 1902.

4685. May 5.—Varying order 3238 of July 3, 1907, so as to permit railway companies, subject to the Board's jurisdiction, to equip passenger coaches with one fire extinguisher instead of two.

4686. May 7.—Authorizing G.T.R. to construct a spur to the People's Specialty Co.'s premises, Grand Ligne, Que.

4687. May 7.—Authorizing People's Telephone Co. to make telephonic connection with C.P.R. ticket office and freight office, Sherbrooke, Que.

4688. May 7.—Ordering People's Telephone Co. to substitute copper wires for iron wires where they cross the C.P.R. on College St., Lennoxville, Que.

4689. May 6.—Granting leave to Toronto and Niagara Power Co. to erect transmission wires across the G.T.R. near Allanburgh, Ont.

4690. May 5.—Authorizing the G.T. Ry. to reconstruct and strengthen subway where C.P.R. tracks cross the G.T.R. main line east of the G.T.R. station at Brockville, Ont.

4691. April 30.—Authorizing North American Telegraph Co. to erect telegraph and telephone wires across Bay of Quinte Ry. west of Marlbank, Ont.

4692. May 5.—Dismissing application of E. S. Brennan, of Hamilton, Ont., for a writ of sequestration to sequester the goods, chattels, and personal estate and the rents, issues and profits of the real estate of the G.T.R. Co.

4693. May 5.—Ordering Vancouver, Victoria and Eastern Ry. to pay costs incurred by Municipality of Delta in connection with application for leave to carry its railway along the river road in that municipality.

4694. May 5.—Dismissing application of G.T.R. for order to vary or amend par. 5 of order of April 5, 1904, re wages of watchman at crossing with N., St. C. and T. Ry. at Merritton, Ont.

4695. May 7.—Authorizing C.P.R. to reconstruct bridge 86.4 over Maple Creek, Sask.

4696 and 4697. May 4.—Authorizing Bell Telephone Co. to erect wires across C.P.R. near Linwood and Guelph stations, Ont.

4698. May 7.—Authorizing C.P.R. to construct a spur line to Oliver & Webster's premises, Owen Sound, Ontario.

4699. May 7.—Authorizing C.P.R. to operate its trains over crossing with C.N.R. to Bird's Hill gravel pit, Man.

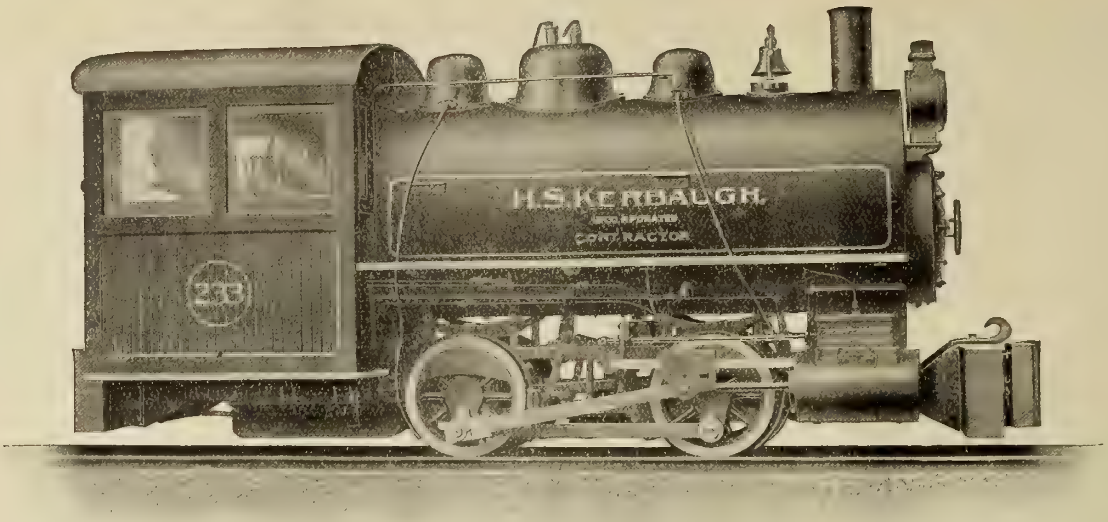
4700. May 6.—Approving Esquimalt and Nanaimo Ry. location from mileage 87.5 to 89, B.C.

4701. May 6.—Approving revised location of G.T.P. Ry., mileage 103.00 to 119.58, sec. 16, and mileage 0 to 10.238 west of 5th meridian.

4702. May 6.—Approving C.P.R. location from Wellington to Alberni, mileage 97.9 to 135.34, through the districts of Nanoose, Cameron, and Alberni, Vancouver Island, B.C.

4703. May 6.—Authorizing Niagara, St. Catharines and Toronto Ry. to open for traffic the portion of its line from Fonthill to the Welland River, near Welland, Ont., a distance of five miles.

4704. May 6.—Approving deviation in location of C.P.R. at the crossing of the



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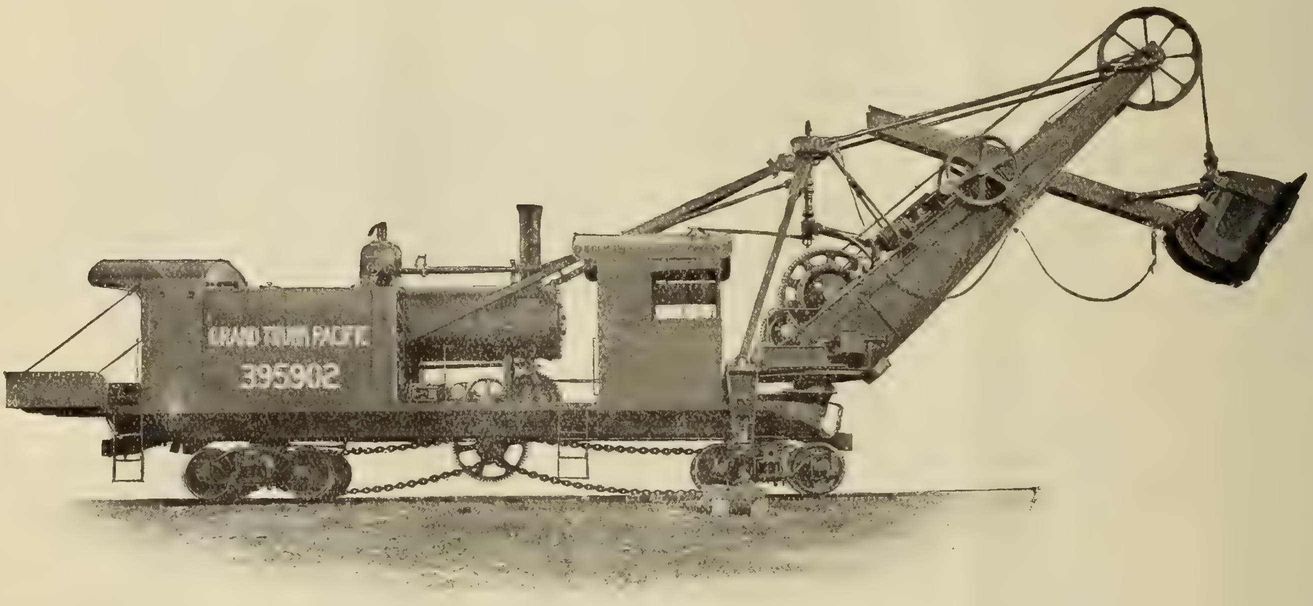

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St. John River, between the parishes of Woodstock and Northampton, N.B.

4705. May 6.—Authorizing London Township Telephone Co. to erect wires over G.T.R. near Denfield station, Ont.

4706. May 6.—Authorizing C.P.R. to construct a spur line to the Hastings Shingle Manufacturing Co.'s premises, New Westminster, B.C.

4707. May 6.—Authorizing Canadian Northern Quebec Ry. to construct a pile trestle over St. Charles River, St. Sauveur parish, Que.

4708. May 7.—Authorizing C.P.R. to construct a bridge over the highway, near Highlands, Que., on its Lachine Canal south bank branch.

4709. May 7.—Authorizing C.P.R. to reconstruct bridge 118.0, over McKay Creek, on its Medicine Hat section, Alta.

4710. May 13.—Granting leave to Saraguay Electric Light and Power Co. to erect wires across the G.T.R. at Cote St. Paul Road, Turcot Village, Que.

4711. May 13.—Directing C.P.R. to remove barbed wire or any other obstruction placed across or in the vicinity of the crossing over its Atlantic and North-Western Division connecting Crescent Ave. and Fenwick Ave., Montreal West, Que.

4712. April 30.—Granting application of M.C. Rd. for authority to amend plan filed in connection with siding to the Essex Canning and Preserving Co.'s premises, Essex, Ont.

4713 and 4714. May 11.—Authorizing Yarmouth Rural Telephone Co. to erect wires across G.T.R. in Yarmouth tp., Ont.

4715. May 6.—Authorizing C.P.R. to construct branch line to the Estevan Milling Co.'s premises, Estevan, Sask.

4716. May 11.—Authorizing C.P.R. to construct its railway across Sixth St., and Ninth and Tenth Aves., Estevan, Sask.

4717. May 11.—Authorizing Yarmouth Rural Telephone Co. to erect wires across M.C. Rd. in Yarmouth tp., Ont.

4718. April 30.—Approving character of work proposed to be constructed by Harwich township, Ont., on Pere Marquette Ry. lands in connection with the McGregor drain.

4719 to 4723. May 11.—Authorizing Central Ontario Ry. to construct its railway across various highways in McClure tp., Ont.

4724. May 13.—Granting leave to City of Ottawa, Ont., to lay sewer under G.T.R. at Richmond Rd.

4725 to 4727. May 13.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to erect wires across the Pere Marquette Ry. at Main St. east of Kingsville, at Pelton, and at Lansdowne Ave., Kingsville, Ont.

4728. May 13.—Authorizing the National Transcontinental Ry. Commissioners to expropriate and use a portion of the New Brunswick Ry.'s right-of-way and lands near Theriault, N.B.

4729. May 13.—Authorizing the G.T.R. to cross with its second track the United Counties Ry. (operated by the Q. M. and S.R.), at St. Hyacinthe Jct., Que.

4730. May 13.—Authorizing C.P.R. to construct spur lines from its Lachine Canal south bank branch to the Consumers' Cordage Co., and the Dominion Bag Co.'s premises, Montreal, Que.

4731 and 4732. May 11.—Authorizing Provincial Light, Heat & Power Co. to carry its transmission lines across the G.T.R. at Dorval, and near Rockfield station, Que.

4733. May 19.—Recommending to the Governor-in-Council for sanction an agreement between the Vancouver, Westminster & Yukon Ry. Co., and the Vancouver, Victoria & Eastern Ry. and Navigation Co., dated March 26, 1908, for the sale of certain portion of the undertaking and property.

Quebec Bridge and Railway Company.

Four appendices additional to those published with the report of the commission which investigated the collapse of the Quebec Bridge, were presented to Parliament, April 1. One of these is an examination of the various full-sized column tests that have been made in the U.S. The commissioners point out that no evidence was forthcoming to show that either Mr. Cooper or Mr. Szlapka ordered any investigation to be made of the tests, data that were available, and when the comparative magnitude of the undertaking is remembered it is difficult to explain their failure to check their conclusions on the Phœnix testing machine, which was at their disposal.

Another appendix compares the stresses in the several members of the main trusses, computed from the bridge as finally designed, with the stresses authorized by the specifications. It says that the error of stress in the main chords near the centre post, due to an error of assumed dead load was fully 10%. No satisfactory explanation of the occurrence of this error had been offered. Messrs. Deans, Szlapka and Cooper permitted the shops and rolling mills to commence work without taking any steps to test the correctness of the assumed load, and the probable dead load did not appear to have been estimated from the plans until at least 18 months after the work of fabrication was commenced. The commissioners are of opinion that no manufacturing should have been done until the designers had so advanced with their work as to be able to make a proper estimate of the weight of the bridge. Manufacturing was commenced in July, 1904, without any checking, although the specification called for it, and the contract practically demanded it.

Replying to a question in the House of Commons, recently, the Minister gave some details as to the cost of the bridge to the country. In 1899 he said a subsidy of $1,000,000 was appropriated, of which $374,353 was paid, and the balance was cancelled under the agreement of 1903. In 1907 the Government advanced by way of loan to the company, $2,000,000, and received as security £478,700 of guaranteed bonds, being part of the securities guaranteed by the Government under chap. 54 of the Statutes of 1903. This act authorized the Government to guarantee the company's bonds to the amount of $6,678,200. The bonds, after being guaranteed, were delivered to a trust company to be applied to the purposes of the company; they are not being issued to the public, but were being used as collateral in the raising of loans from the bank to the amount, including interest, to June 30, 1907, of $5,561,507.23. The advance of $2,000,000 from the Government was applied in reduction of this indebtedness. The Bridge Co. advised that the cost of the bridge, including the Chaudiere bridge and the railway approaches to Mar. 1, 1908, was $6,899,033.03, to which is to be added interest from June 30, 1907, on the advances for which the bonds of the company were pledged. The amount mentioned includes the customs duties, harbor dues and fees, amounting to $510,288.73. No estimates had been made of the cost of reconstruction.

The Minister of Finance, in further reply to the question as to the cost of the Quebec Bridge said in addition to the bank's claim of $5,016,453, against which the company's bonds had been deposited, there was $155,000 due for an advance which went into the construction account. The rate of interest was 5%.

The Secretary of State replying to a question in the Senate, recently, said the old company, formed in 1887, did not pay any fees to its directors; and the new company took over the undertaking in 1897. Since Hon. S. N. Parent became President the directors had been paid as follows: R. Audette, Vice-President, $5,656; V. Boswell, $3,201; P. B. Dumoulin, $2,000; Hon. N. Garneau, $2,720; J. B. Laliberte, $2,915; G. Lemoine, $3,280; Hon. S. N. Parent, for services as President for over 10 years, $24,250; H. M. Price, $3,595; Hon. J. Sharples, $2,000. The services for which payment was made was attendance for and general services as members of the board, the President and Vice-President receiving a special fee for their services. The Secretary has been paid $16,890, and $425 travelling expenses from March, 1897, to date. The Chief Engineer had been paid $45,150.

The Premier announced in the House of Commons May 14, that the committee of the House to investigate the affairs of the company would be composed of A. K. Maclean, Chairman; W. Chisholm, Col. O. E. Talbot, W. A. Galliher, F. D. Monk, S. Barker, and R. N. Walsh.

Press reports stated recently that the Government had under consideration the question of changing the site of the bridge to Batiscan. Replying to a question in the House of Commons May 6, the Premier said there was not the slightest foundation for the report. The width of the river at Batiscan he said must be twice its width at Cap Rouge. It is pointed out in connection with the report that the Government has already made large expenditures in connection with the bridge, in the way of connections and approaches, and it is hardly likely that these will be abandoned. On the other hand it is said that while the river is wider at Batiscan, the channel is narrower, and would obviate the necessity of the construction of a long span.

◆

Fusible Plugs for Locomotive Boilers.

The Secretary of the Board of Railway Commissioners issued the following circular May 9:

"The Board has under consideration the issuance of a regulation requiring railways subject to its jurisdiction, to fit all locomotive engines with fusible plugs. I attach a copy of the proposed regulation and am directed to ask that your company file with the Board as early as possible, an expression of its views in connection therewith.

"Every railway company subject to the legislative authority of the Parliament of Canada operating any railway by steam power shall cause every locomotive engine used on the railway, or portion of the railway operated by it, to be fitted and kept fitted with fusible plugs in the crown sheet of the fire boxes as follows, namely:

"(a) All engines with fire boxes—x to be fitted with two fusible plugs in the crown sheet.

"(b) All engines with fire boxes—x to be fitted with one fusible plug in the crown sheet.

"(c) Said fusible plugs to be located in crown sheet as the railway officials in charge of the motor power may think best for the protecting of the crown sheet.

"(d) Plugs to be removed from the crown sheet every 14 days, for the purpose of inspection and cleaning.

"(e) The inspection of these plugs must be done by capable and responsible employes, who shall be assigned to this work, and whose duty it shall be to report to the locomotive foreman, on a printed form provided for the purpose, the date of the inspection, the number of the engine, and the conditions of the plugs.

"(f) These reports to be forwarded by the locomotive foreman to the master mechanic, who shall keep a record of the inspections in a book provided for the purpose, said book to be open to inspection at any time when called upon by inspectors or those interested.

Note—We are advised that it is the intension to insert dimensions in clauses a and b where x is marked, should it be finally decided to issue the regulation referred to.

THE

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This Company has secured thirteen square miles of valuable mining rights, etc., in the northern portion of the Province of Quebec, in the Abittibi and Chibogomo districts, organized and managed in the interests of Railroaders.

If a prospectus has not been mailed you send for one to the Secretary. Read carefully and you will at once fill in an application for the greatest number of shares you can pay for in four payments.

The Directors and Executive of this Company are closely identified with railroad and telegraph interests as follows:

ARTHUR WALSH - *President and Treasurer*
Local Manager C.P.R. Telegraphs

JAMES POWELL - - *Vice-President*
Mechanical Engineer Motive Power Dept. G.T.R. and Secretary Canadian Railway Club

G. E. BURNS, Freight Claims Agent C.P.R.
A. E. ROSEVEAR, Assistant General Freight Agent G.T.R.
L. A. GLOBENSKY, Ex-Secretary Baie des Chaleurs Railway.
THOS. WILLIAMS, Superintendent C.P.R.

General Counsel—J. C. WALSH, Esq., M.P. (of Walsh & Walsh)

Bankers—THE MERCHANTS BANK OF CANADA

Railway Finance, Meetings, etc.

Atlantic, Quebec and Western Ry.—The Dominion Parliament at its current session has passed an act confirming the right of the company to purchase the Atlantic and Lake Superior Ry. (the old Baie des Chaleurs Ry.), and authorizing it to issue bonds to the extent of $45,000 a mile It is provided that the present legislation will not affect the creditors of the Baie des Chaleurs Ry., and further that municipalities shall not be held liable for subsidies which were voted to that railway, and which have since lapsed.

Canadian Northern Ry.—Recent cables from London, Eng., stated that an issue of $10,000,000 of Canadian Northern Ry. 4% bonds had been underwritten. It was reported that the bonds were being offered at 92%. It was reported, April 30, that the underwriters were obliged to take up 87% of the bonds. The issue referred to is £2,000,000 4% perpetual consolidated debenture stock, which is perpetual and irredeemable, ranking pari passu in all respects with the 4% perpetual consolidated debenture stock officially quoted on the London Stock Exchange. The trust deed provides that the total amount of debenture stock shall not exceed £2,000 per mile of line for the time being open and operated, and an amount not exceeding the cost price of securities of independent corporations from time to time deposited with the trustees, but the company cannot issue any debenture stock against such securities without the consent of the trustees. The debenture stock is secured by a general charge upon the undertaking, property and assets (other than land and money subsidies) of the company, subject to the £1,180,600 of bonds primarily charged on the Ontario Division of the railway (287 miles), and to charges created, or to be created, not exceeding $10,000 per mile of line, other than the above-mentioned 287 miles of line in Ontario, or $15,000 per mile if guaranteed by the Dominion Parliament or any of the Provinces of Canada, and is a specific first mortgage upon certain securities deposited with the trustees.

Central Ontario Ry.—There has been deposited with the Secretary of State at Ottawa, a discharge of a bond mortgage dated April 1, 1882, made by the company to the Toronto General Trusts Corporation to secure an issue of bonds to the amount of $2,200,000. The annual meeting was held at Toronto, Ont., May 20. Following are the officers and directors for the current year: President, S. J. Ritchie; Vice-President, C. E. Ritchie; Manager, G. Collins; other directors, T. M. Kirkwood, W. S. Jaques, J. H. Stewart, R. Fraser, S. S. Lazier; Treasurer, J. D. Rowe.

Central Ry. of Canada.—It is reported that arrangements are being made in London, Eng., for placing an issue of £2,350,000 of 5% bonds at 96. This is a first issue, and if made would enable the company to start construction.

Chignecto Marine Transport Ry. Co.—A. D. Provand, who represents the trustees of the bondholders of this company, has again been in Ottawa for some time with a view of interesting members of Parliament in a proposal to secure some compensation to the shareholders and bondholders for the money sunk in this enterprise. It is claimed that the company expended $4,000,000 upon the work, $3,000,000 of which was spent in Canada up to the time Parliament refused in 1899 to grant any further extension of time for construction. The company proposed to construct a railway for the transhipment of vessels across the isthmus dividing the Bay of Fundy, from Northumberland Strait.

Crow's Nest Pass Coal Co.—Supplementary letters patent were issued under the Dominion Companies Act, April 27, increasing the company's capital stock from $4,000,000 to $10,000,000. The company owns the Morrissey, Fernie and Michel Ry.

Delaware and Hudson Co.—The shareholders have authorized the issue of a first and refunding mortgage of $50,000,000, of which $6,500,000 is to be reserved for refunding underlying mortgages. An issue of $20,000,000 will be made shortly, and the remaining $23,500,000 will be reserved for future requirements. At the annual meeting May 12, the retiring board of managers was re-elected as follows: R. M. Oliphant, C. M. Depew, J. J. Astor, R. S. Grant, C. A. Peabody, L. F. Loree, J. R. Maxwell, C. Vanderbilt, New York City; G. I. Wilber, Oneonta, N.Y.; E. H. Harriman, Arden, N.Y.; D. Clarke, Dumont, N.J.; J. A. Linen, Scranton, Pa.; W. S. Opdyke, Alpine, N.J.

Dominion Atlantic Ry.—At the annual meeting held recently in London, Eng., a vote of sympathy with the family of the late T. Fitch Kemp was passed. Mr. Kemp had been connected with the D.A.R. or its predecessors, as director or President, for over 30 years. Vice-President Denny reported the rolling stock, permanent way and steamships of the company to be in good condition, and General Manager Gifkins spoke in an encouraging manner of the past year's business and of the future prospects of the company. T. R. Ronald has succeeded to the Presidency, Mr. Denny is now Vice-President, and J. H. Robinson, C.E., has been elected to the vacancy on the directorate.

Duluth, South Shore and Atlantic Ry.—Press reports from Bay City, Mich., state that the D., S.S. and A.R. is negotiating for a perpetual lease of the Detroit and Mackinac Ry., and for the lease or purchase of the Pontiac, Oxford and Northern Rd. The Detroit and Mackinac Ry. extends from Bay City to Cheboygan, and with its several branches has a total mileage of 334 miles; while the Pontiac, Oxford and Northern Ry. extends from Pontiac to Caseville, Mich., 100 miles. The object is said to be the securing of a direct connection with Detroit, but this would involve the construction of a connection between the two lines named, some mileage into Detroit, and ferry communication with Fort St. Ignace, Mich., which is the terminal of a D., S.S. and A. branch. J. D. Hawkes, Detroit, President and General Manager, Detroit and Mackinac Ry., says there is nothing whatever in the story.

Grand Trunk Pacific Ry.—C. M. Hays, President, on his recent return to Montreal, from London, Eng., where he had been in connection with a bond issue, said in an interview that the G.T. Pacific Ry. was now, with the large balance in hand in its treasury, and the two issues made this year—one for $5,000,000 and the other for $10,000,000—exceedingly well provided with funds. They had sufficient for all their requirements for the next two years. The company sold the bonds outright to a banking firm, which firm subsequently put them on the market. The first day's sale was slow, but the issue was subsequently fully sold at profitable prices.

Hon. W. S. Fielding, Dominion Finance Minister, went to New York, May 7, to discuss matters in connection with the placing of the company's bonds. It is stated that difficulty is being met with in placing the bonds by the financial houses, largely owing to the fact that the company will have to pay interest upon the cost of the Eastern Division, which is being constructed by the Transcontinental Railway Commission. The estimated cost of this division is $115,000,000 and the interest on this at 3½% is $3,450,000 a year. It is stated that owing to the nature of the country through which the line is being constructed the prospects of traffic are small, and that the western section of the line will be unfairly burdened. A suggestion was reported to have been made that the route be changed somewhat so as to run through Montreal and other populous centres, but it is officially stated that there is no intention to change the route, on a considerable portion of which construction is already in progress.

Replying to a question in the House of Commons, May 14, the Minister of Finance said bonds to the amount of £3,200,000 par value have been guaranteed by the Government and issued to date in respect of the Western Division of the G.T. Pacific Ry. These bonds have been delivered to purchasers. The proceeds of these bonds remitted to Canada amounted to $14,559,673.68, which sum included interim interest accretions on instalment, payments up to date of remittances.

Great Northern Ry.—The following controlled companies are now directly owned by the G.N.R. Co.: St. Paul, Minneapolis and Manitoba Ry.; Eastern Ry. of Minnesota; Willmar and Sioux Falls Ry.; Park Rapids and Leech Lake Ry.; Minnesota and Great Northern Ry.; Duluth, Watertown and Pacific Ry.; Dakota and Great Northern Ry.; Montana Central Ry.; Montana and Great Northern Ry.; Billings and Northern Ry.; Spokane Falls and Northern Ry.; Columbia and Red Mountain Ry.; Washington and Great Northern Ry.; Seattle and Montana Ry., and Minneapolis Union Ry.

Halifax and Southwestern Ry.—The total amount of the subsidies, etc., paid by the Nova Scotia Government in connection with the construction of the H. and S.W.R. to the end of the fiscal year, Sept. 30, 1907, was reported at the recent session of the Legislature to have been $3,021,080.66, of which there was paid during that year $288,174.99 under the general act, and $11,500 under chap. 26 of the statutes of 1903.

Intercolonial Ry.—The Dominion Parliament at its current session voted $2,525,000 chargeable to collection of revenue on account of the I.C.R., and $4,375 on account of the Windsor Branch, which is operated under arrangement by the Dominion Atlantic Ry.

Inverness Ry. and Coal Co.—At the annual meeting held recently, the directors reported with respect to the development of the company's mining property, and recommended the provision of the capital necessary for the further development of the property. The increase in the output of the mine, and the opening up of a manufacturing industry on the line of the railway, would necessitate the purchase of additional rolling stock. For this purpose an amount had been included in the $250,000, for which amount authority would be asked from the bondholders to issue prior lien bonds. The earnings of the company's railway from outside sources showed a satisfactory increase as compared with the previous year.

Lake Erie and Detroit River Ry.—At the annual meeting May 5, the following officers and directors were re-elected for the current year: President, W. Cotter, Detroit, Mich.; Vice-President, A. Leslie, Walkerville, Ont.; Secretary-Treasurer, J. E. Howard, Detroit, Mich.; other director, A. H. Skirring, Chatham, Ont.

Lake Superior Corporation.—The annual meeting, which had been adjourned from time to time since Oct., 1907, owing to litigation, was held at Jersey City, N.J.,

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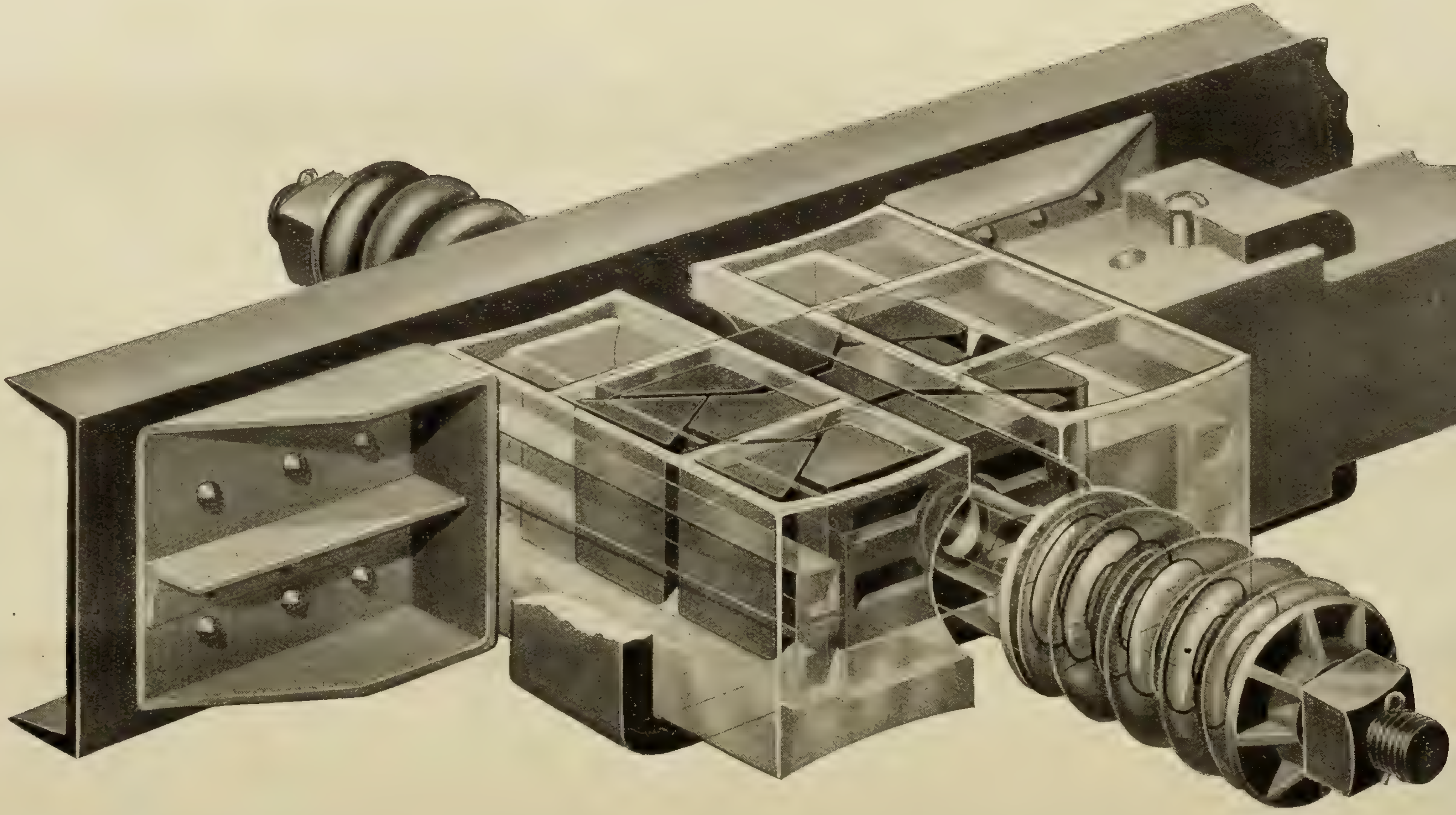

Cardwell Manufacturing Company, Chicago, Ill.

Manufacturers of CARDWELL ROCKER SIDE BEARINGS

in April. Following are the officers and directors for the current year: President, C. D. Warren, Toronto; First Vice-President, F. B. Reeves, Philadelphia, Pa.; Second Vice-President, T. J. Drummond, Montreal; Secretary and Treasurer, J. T. Terry, Jr., New York; other directors: Jas. Hay, H. G. Lloyd, C. S. Hinchman, J. T. Lea, Philadelphia; L. N. Lowell, Jersey City; R. W. Smith, Montreal; G. Pattison, M.P.P., Preston, Ont.; W. J. Sheppard, Waubashene, Ont.

London and Port Stanley Ry.—The question of the renewal of the lease of the line to the Lake Erie and Detroit River Ry. (Pere Marquette Rd. lessees) was under discussion at a recent meeting of the directors, in London, Ont., but nothing in the way of a decision was reached. A lease of a site for an elevator at Port Stanley, Ont., was granted to R. W. Price, subject to his securing the approval of the Government for the same.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—There have been listed on the New York Stock Exchange various additional amounts of common and preferred stock, making the total amount listed $7,002,300 of preferred and $14,004,500 common stock. Authority has also been issued to list from time to time to July 1, various other amounts, making the total amounts authorized to be listed $16,800,000 of common stock, and $8,400,000 of preferred stock.

During the six months ended Dec. 31, 1907, according to U.S. papers, the M., St. P. and S.S.M.R. Co. purchased stocks and bonds of other corporations to the extent of $1,601,600, nearly the whole of which consisted of securities of the Spokane International Rd., over which the company, through the C.P.R., gets an entrance into Spokane, Wash. This is a small line, which Sir Thos. G. Shaughnessy, President C.P.R., is quoted as saying earned in the first year of its operation sufficient to pay expenses and fixed charges.

Montreal and Vermont Jct. Ry.—The annual meeting was held at Stanbridge, Que., May 13. Following are the officers for the current year: President, C. M. Hays; Vice-President, E. H. Fitzhugh; Secretary-Treasurer, A. H. Gilmour; Assistant Secretary-Treasurer, W. H. Chaffee; Auditor, W. G. Crabbe; Managing Directors, C. M. Hays, E. H. Fitzhugh and G. C. Jones.

Morrissey, Fernie and Michel Ry.—Following are the officers and directors for the current year: President, G. G. S. Lindsey, K.C.; Vice-Presidents, Hon. R. Jaffray, Sir Henry M. Pellatt; Treasurer, E. R. Wood; other director, E. Rogers; Secretary, R. M. Young. The company, which is a subsidiary of the Crow's Nest Coal Co., does not issue any separate report.

New Brunswick Coal and Ry. Co., Central Ry. of New Brunswick.—The New Brunswick Legislature has under consideration an act authorizing an inquiry into certain matters connected with the construction, etc., of these railways. The bill directs that the Commission shall consist of three persons, one of whom shall be a Judge of the High Court, or County Court, or a barrister of ten years' standing, and shall investigate the expenditure of all moneys granted since Jan., 1901, either as subsidies or otherwise in connection with the railway from Norton to Chipman, and from Chipman to Minto and the branches; the issue and sale or dealing with bonds and debentures guaranteed by the Government, the expenditure of all moneys made by the company upon or in connection with the Central Ry. previous to the purchase of the same by the company; the purchase of the Central Ry. by the N.B. Coal and Ry. Co.; the receipts and revenues of the company from the time they were taken over; and various other matters connected with the transactions of the company.

The Commissioners recently appointed reported that they found the expenses of operating the line were out of all proportion to other lines. There was a standing interest against the line of $32,000 and the surplus claimed during the past few years had only been obtained by charging to the Province considerable sums for engineering expenses which should have been charged against the line.

New Brunswick Ry. and Coal Co.—A St. John, N.B., report states that the late Government of New Brunswick prior to resigning office voted $2,500 to G. McAvity, as one of the Commissioners having charge of the operation of the railway for the Government, and that $2,500 had been paid to Mr. McAvity in Nov., 1905. It is understood that Senator King, who acted as the second Commissioner, made no charge for his services. Both Commissioners resigned with the Government

Pere Marquette Rd.—W. W. Crapo, and J. Harmon, the arbitrators appointed to settle claims existing between the P.M.R. and the Cincinnati, Hamilton and Dayton Rd., arising out of the disbanding of the Great Central System, in which the two were united during 1905, have filed a report in the federal court at Grand Rapids, Mich., awarding the P.M.R. $1,364,387. The Cincinnati, Hamilton and Dayton Rd. had denied all claims and the P.M.R. had asked about three times the amount of the award. The principal claim was based upon a lease under which the C.H. and D. Rd. took over the P.M.R. for 999 years, and which the arbitrators decided was in effect from March, 1905, until Dec. 4, 1905. Other items figuring in the claims were the purchase of equipment and the payment by the P.M.R. Co. of joint terminal charges in Toledo.

Prince Edward Island Ry.—The Dominion Parliament at its current session voted the following sums, chargeable to collection of revenue on account of the P.E.I.R. generally, $100,000; and to pay the widow of the late H. Houle, trackmaster, a gratuity equal to two months' salary, $176.66.

Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamship Co.—Replying to a question in the House of Commons recently, the Minister of Finance said the excess paid by the Government over the amount earned by the company for the year ended April 30, 1907, under the terms of the agreement of Aug. 5, 1889, was $67,315.35; the amount due by the company on account of deficits, according to the last annual adjustment of accounts to April 30, 1907, was $1,630,408.09. The cash payments required under the agreement after April 30, 1907, were seven of $40,000 each, or $280,000 in all. Of these amounts two payments of $40,000 each had been made, leaving five instalments yet due; the Government retains 493,269.34 acres of land from the land granted to the company in respect of the construction of the railway, as security against indebtedness by the company to the Government.

Quebec Central Ry.—Gross earnings for Feb., $70,376.89; expenses, $58,220.33; net earnings, $12,156.56, against, $50,831.00 gross earnings; $43,813.54 expenses; $7,017.46 net earnings for Feb., 1907. Gross earnings for March, $99,109.96; expenses, $66,074.40; net earnings, $33,035.56; against $71,531.33 gross earnings; $48,556.56 expenses; $22,974.77 net earnings for March, 1907. Gross earnings for 3 months ended March 31, $238,269.01; expenses, $180,947.79; net earnings, $57,321.22; against $177,146.49 gross earnings; $136,728.20 expenses; $40,418.29 net earnings for same period 1907.

Temiscouata Ry.—A meeting of shareholders was held at Quebec April 21, for the purpose of approving and sanctioning an agreement respecting the purchase of the company's lands, right-of-way, etc., by the Transcontinental Railway Commission, and also for the purpose of approving and sanctioning the action of the directors in adopting and authorizing the publication of amended statements and accounts for the year ended June 30, 1907. We are advised that the Transcontinental Railway route as located will parallel the Temiscouata Ry. for a distance of about 18 miles, between Caron Brook and Edmundston, N.B. About half a mile west of Edmundston the location which it was desired to follow came actually on to the Temiscouata Ry. right-of-way, and in some cases would be on its track for a distance of about a couple of miles. By a mutual arrangement the Temiscouata Ry. agreed to sell two miles of right-of-way, and the Transcontinental Ry. Commission agreed to construct two miles of new track, the Transcontinental track being laid on the present site of the Temiscouata track, so that when the work is completed the two railways will be as a double-track line for the distance named.

Traffic receipts for Feb., $13,955.15; Mar., $15,831.40; against $11,198.78 for Feb., and $14,364.42 for Mar., 1907. Total receipts for 3 months ended Mar. 31, $46,430.46, against $37,937.80 for same period 1907.

Temiskaming and Northern Ontario Ry.—In reply to a question in the Ontario Legislature recently, the Provincial Treasurer said the total capital indebtedness of the T. and N.O.R. to Dec. 31, 1907, was $11,677,783.95, and there had been an additional $500,000 expended to date. The Commission had not sold any bonds and had no authority to do so; it was not indebted to any bank. During the year ended Dec. 31, 1907, the railway earned $779,237.32 from the transportation of passengers and freight, and the total revenue from other sources amounted to $125,184.01; while the expenditures were as follows: Operating expenses, $645,412.29; capital account, $2,617,484.70. The interest on the bonds issued was paid by the Government; the amount paid, including sinking fund, being $339,744.34, of which $235,090.69 was received on account of net earnings of the railway. On another day the Provincial Treasurer said of a loan of $4,000,000, which it was proposed to raise in England, $1,000,000 would be required for the completion of the railway, and the other $3,000,000 would be returned to the treasury in lieu of cash already advanced to the T. and N.O.R.

Toronto, Hamilton and Buffalo Ry.—At the recent session of the Ontario Legislature application was made for an act vesting in the Bank of Hamilton and the T.H. and B.R. certain lands which belonged originally to an absconding banker, and were pledged to the Bank of Hamilton. The absconding banker was never arrested, and he is supposed to have died some years ago of yellow fever in Rio de Janeiro, South America. The land was expropriated in connection with the construction of the T.H. and B.R., and the application was for the purpose of getting a title to the property The Legislature refused to pass the act. (April, pg. 247).

Vancouver, Victoria and Eastern Ry. and Navigation Co.—The property and franchises of the Vancouver, Westminster and Yukon Ry. Co., with respect to the line extending between New Westminster and Vancouver, have been handed over to the V.V. and E.R. and N. Co. The formal application to the Board of Railway Commissioners for a recommendation to the Governor-General to sanction the agreements for the purchase was made at Ottawa, May 12. The company has also taken

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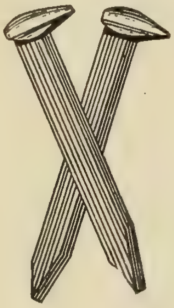

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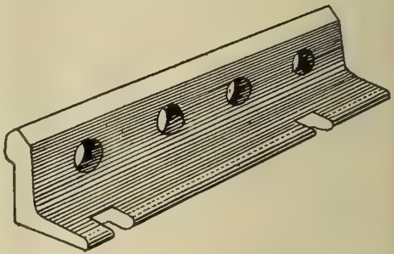

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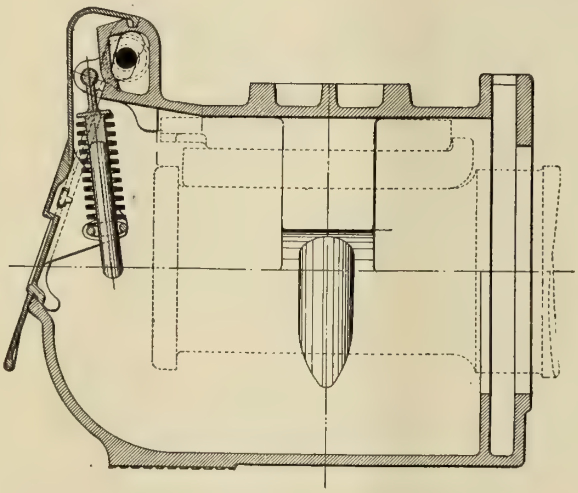

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over the property and franchises of the Victoria Terminal Ry. and Ferry Co., with respect to lines constructed, under construction and authorized, on the mainland. The lines in question were operated by the Great Northern Ry. through a subsidiary company, and connection was obtained between the two lines over the Fraser River bridge, built by the British Columbia Government, for the use of which tolls are paid. By their amalgamation with the V.V. and E. Ry. and N. Co., the Great Northern Ry. lines in the vicinity of Vancouver have been consolidated under one company.

White Pass and Yukon Route.—A meeting of shareholders of the British Yukon Ry., the subsidiary company owning the Canadian portion of the company's railway, was called to be held at Ottawa, May 27, to authorize the directors to issue debentures or other securities to the extent of £6,000 for every mile, not exceeding 16 of the company's branch line of railway, extending from near mile post 106, as now constructed and operated south of Whitehorse, Yukon Territory, northwesterly towards the Tahkeena River. The issue of bonds is to be secured upon the branch line.

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309,900	116,100+
Nov..	957,400	689,100	268,300	215,700+
Dec..	801,100	558,400	242,700	264,900+
Jan...	578,200	462,500	115,700	226,800+
Feb..	485,600	401,900	83,700	152,400+
Mar.	625,300	453,400	171,900	136,500+
	$6,997,000	$5,017,300	$1,979,700	$1,907.500+

Approximate earnings for Apr., $686,100, against $569,900 for Apr., 1907.

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7.010,177.40	4,439,902.25	2,570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
Dec.	6,418,576.38	4,341,386.80	2,077,189.58	188,404.76−
Jan..	4,498,560.80	3,874,569.02	623,991.78	75,664.17+
Feb..	4,129,044.09	3,771,947.48	357,096.61	264,891.51−
Mar.	5,424,931.26	4,123,901.77	1,301,029.49	944,706.73−
	$54,938,032.22	$38,224,891.75	$16,713,140.47	$1,288,778.18−

Approximate earnings for Apr., $5,230,000, against $6,391,000 for Apr., 1907.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for March, $230,517.43; expenses, $157,810.75; net earnings, $72,706.68, against $257,495.05, gross earnings; $182,255.66 expenses; $75,239.39 net earnings for March, 1907. Total earnings for nine months ended March 31, $2,405,984.44; expenses, $1,742,957.10; net earnings, $663,027.34; against, $2,397,019.89, total earnings; $1,611,736.38 expenses; $785,283.51 net earnings for same period, 1906-07. Approximate earnings for April, $219,410, against $277,557 for April, 1907.

MINERAL RANGE RD. — Gross earnings for March, $68,436.80; operating expenses, $64,747.05; net earnings, $3,689.75, against $70,778.52, gross earnings; $54,014.12 operating expenses; $16,764.40 net earnings for March, 1907. Total earnings, 9 months ended March 31, $605,108.34; operating expenses, $511,278.99; net earnings, $96,685.71, against $579,916.62, total earnings; $434,069.28 operating expenses; $145,847.34 net earnings for same period, 1906-07. Approximate earnings for April, $66,053, against $67,760 for April, 1907.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Approximate earnings for April, $844,111, against $1,137,171 for April, 1907.

Grand Trunk Ry. Earnings, Expenses, etc.

Approximate earnings for March, $3,057,944, against $3,571,270 for March, 1907.

The Alaska Central Ry. Co., to which large advances were made by the Sovereign Bank, has gone into receivers' hands.

G.T.R. Betterments, Construction, Etc.

Ottawa Terminals.—Building operations on the baggage annex at the Central station, which were suspended in the fall of 1907, were resumed May 10. This building, it is stated, will be used as a temporary station during the erection of the new joint building.

The amended plans for the new union station and G.T.R. hotel were submitted to the city council May 15. In a letter, C. M. Hays, Second Vice-President and General Manager, said: "So far as the hotel is concerned, it is substantially in accordance with the plans and model which have heretofore been presented and which, I understand, were satisfactory. As to the station plans, those now presented are, in our opinion, more appropriate in their design and appearance for station purposes than those heretofore produced and fully meet the requirements for many years to come. The estimated cost of the hotel and appurtenances is something in excess of $1,500,000 and for the station about $525,000, exclusive of the cost of baggage and express buildings, train sheds, platforms, tracks, etc., while as you will recall, our obligations with the city call for a station costing not less than $250,000 and a hotel costing not less than $1,000,000. The plans are presented by our architects, Ross & MacFarlane, of Montreal, who will be prepared to give you any explanations in detail that may be desired."

The new plans for the station show a main central building and two subordinate wings. In the main building on a level with the tracks is located the general waiting room, containing 9,069 sq. ft. Access to the waiting room is obtained directly from Rideau St., by three spacious openings through the main hall and stairs 30 ft. wide. Egress to the trains from the waiting room is obtained by three similar openings leading to the general concourse, which is 60 ft. wide. Tickets, telegraph and telephone booths, information bureau, news stands, ample parcel room, and other conveniences are provided along the four sides of the waiting room where they are easily accessible and visible. A broad covered passage at the easterly end of the large concourse leads directly to the baggage room, which is located in the baggage building with the express offices, power plant, immigrant rooms, etc. A broad, well-lighted subway will lead through to the hotel. A special waiting room has been made for governmental use and a large carriage course to the east of the main concourse is available. The building is to be of Indiana limestone and the architectural treatment of the exterior has been designed with a view of obtaining a monumental effect and of expressing clearly on the exterior the function of each part of the building.

The plans submitted for the hotel embody some of the suggestions made in the plan of ground floor previously prepared, but in the basement and all floors above ground floor there is a different arrangement. On the first floor there are 33 chambers, three state apartments and two parlors. On the second, third, fourth and fifth floors there are 58 chambers on each floor, two of which are suggested for use as parlors. The total number of sleeping apartments for guests is 302; of this number 155 will have private baths. There will be a palm room, general dining room, private dining rooms, restaurant, banquet hall, ballroom and reception rooms. The main dining room has been well placed with regard to light and aspect, as it has a commanding view of the park and the Parliament buildings. A stairway from the rotunda of the ground floor leads directly to the subway into the station.

Kingston, Smith's Falls and Ottawa Ry.—At the annual meeting of the Kingston Board of Trade, May 6, a communication was received from C. M. Hays, Second Vice-President and General Manager, to the effect that just as soon as money was available this line would be pushed through. In connection with the construction of this line the G.T.R. will undertake extensive and important improvements at Kingston.

The annual meeting of the shareholders of the K., S.F. and O. Ry. Co. is announced to be held at Kingston, June 1.

Port Hope-Midland Second Track.—We are advised that while the surveys in connection with the proposed construction of a second track between Port Hope and Midland, Ont., are being made, there is nothing definite to report as to prospects of construction.

Second Track Work.—In his report on railway work in Ontario during 1907, the Engineer of the Department of Public Works for the Province says, while no new branches were opened for traffic during the year, the following double-track mileage was completed and opened for traffic: Between Brantford and Alford, 3.4 miles; and between Henry St. subway and Brantford, 0.65 mile. On Dec. 31, there was under construction, second track mileage as follows: Between North Parkdale and Toronto Junction, 2.67 miles; and between Merritton and Thorold, 0.52 mile.

John St., Toronto, Crossing.—An interlocking switch and gates similar to those at the crossing of Queen St. east, are to be placed at the crossing of John St., Toronto.

Toronto City Ticket Office.—A contract has been let for the enlargement and refitting of the company's city ticket office at the corner of Yonge and King Streets.

London Improvements.—U. E. Gillen, Superintendent Middle Division, said, recently, the company was going to completely relay all rails in the London yards shortly. The work will be done gradually so as not to interfere with the traffic. So far as any large works of improvement are concerned, General Transportation Manager Brownlee said the company had expected to do something in the way of a new station during the present summer, but at present it was impossible to do anything. "The London people made a big mistake when they did not get their improvements when they had the chance. The improvements which were carried out west of the city had been of great benefit to the company; I should say that the removal of the grade west of London has meant a saving of at least $20,000 a year."

London to Sarnia.—It is expected to relay about 38 miles of the track between London and Sarnia during the summer. (May, pg. 339.)

Steam Shovel Work in B.C.

W. J. Colvin wrote from Abbotsford, B.C., recently: "I should like to call your attention to a record for March made by a 1¼ yard traction shovel now working on the Vancouver, Victoria and Eastern Ry. construction between Cloverdale, B.C., and Sumas, Wash. During the 26 working days this shovel loaded a total of 62,000 yards, making an average of nearly 2,400 yards a day. The best day's work totalled 3,340 yards, and the poorest one was 1,536 yards, the day consisting of two 10-hour shifts. During this time the shovel made four cuts, necessitating four 'move backs.' The usual delays were experienced, such as derailments, shooting down the bank, etc. The shovel was served by two 10-car trains, making an average haul of 500 ft. The material handled was fine gravel with some loose rock, but at several points blue clay streaks were encountered, making the dumping of the cars somewhat slow. The work was in charge of J. P. Livingston, of Seattle. I should be glad to know if you have knowledge of any records equalling this for the same sized shovel."—Railroad Gazette.

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N. A. RHODES, Vice-President

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J. M. CURRY, Sec.-Treas.

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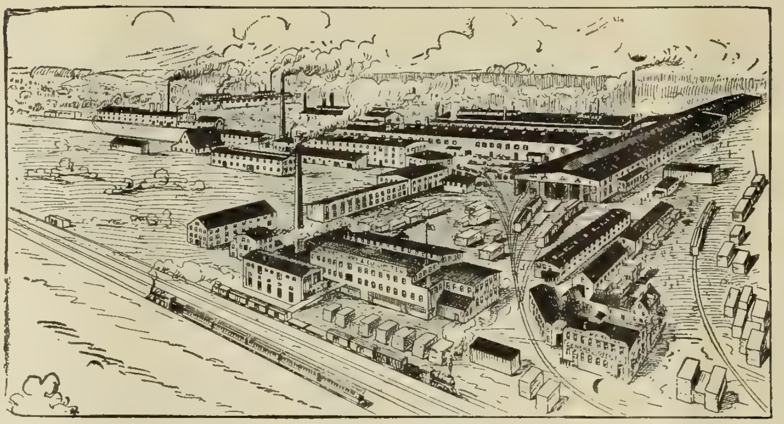

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Mechanical Draftsman
Machine Designer
Electrical Engineer
R. R. Const'n Eng.
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Bridge Engineer
Chemist
Mining Engineer
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Ad Writer
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City __________ *State* __________

C. P. R. Betterments, Construction, Etc.

Interprovincial and James Bay Ry.—At the last session of the Quebec Legislature, a subsidy at the rate of 4,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line, about 50 miles long, from Gordon Creek, the present terminus of the Lake Temiscamingue Colonization Ry. (C.P.R. branch from Mattawa, Ont.) to Ville Marie, on the Quebec shore of Lake Temiskaming, in lieu of the subsidy voted in 1906.

Georgian Bay and Seaboard Ry.—In connection with the construction of this projected line—the portion between Coldwater, on the Toronto-Sudbury Line, and Victoria Harbor, Ont., being under construction—from Victoria Harbor to a junction with the main line between Montreal and Toronto, the Minister of Public Works recently stated in the House of Commons that the Government would dredge the harbor at that point. The company's plans provide, it is reported, for the construction of an elevator of 10,000,000 bush., to be constructed in five units of 2,000,000 bush. each, while the handling plant will have a capacity of 62,000 bush. an hour. The projected line will have a total length of 97 miles, and the surveys provide for a gradient of 0.3 %.

Guelph and Goderich Ry.—Tracklaying was completed into Listowel, Ont., on this branch line early in May, and it is expected that a train service will be placed in operation early in June.

Toronto-Sudbury Line.—The new line from Bolton Junction on the Toronto-Owen Sound line to Romford, Ont., on the company's transcontinental line, will be opened for traffic June 15. It was opened as far as Bala, for the Muskoka tourist season, in 1907. The engineer of the Ontario Department of Public Works in his report for 1907 refers to the work in progress, and says some heavy bridge work has been done on the northerly end of the line, notably at Parry Sound, where the valley of the Seguin River has been crossed by an elevated steel viaduct and at French River.

Tillsonburg, Lake Erie and Pacific Ry.—In connection with the construction of the extension of this line from Ingersoll to Embro, Ont., where it will connect with the St. Mary's and Western Ontario Ry., a deputation waited on the Minister of Railways, May 6, to ask that the Government ask Parliament to grant the usual subsidy.

St. Mary's and Western Ontario Ry.—The by-law ratifying and confirming the agreement with the company has been finally passed by the St. Mary's town council. Cheques for the full balance of the loan of $40,000 authorized were ordered to be drawn at the meeting of the council held May 3.

A deputation waited on the Minister of Railways at Ottawa, May 6, to ask for the granting of a subsidy in aid of the construction of this line at present under construction from St. Mary's to near Embro, Ont.

Walkerton and Lucknow Ry.—Tracklaying on this line between Proton and Walkerton, Ont., about 37 miles, which has been under construction since Aug., 1906, is practically completed, ballasting is in progress, and it is expected that the line will be opened for traffic early in July. A contract has been let for the erection of a station building at Walkerton.

Fort William-Winnipeg Second Track.—It is expected that the second track between Fort William, Ont., and Winnipeg, Man., a distance of 427 miles, will be completed and in operation by fall. The work has been going on for three years, and is now being rushed in all directions. Track is being laid west from Fort William; east and west from Ignace and Kenora, and east from Winnipeg, and the ballasting is gone on with as fast as possible. The second track has already been laid at a number of points along the line, aggregating 300 miles. A recent article published on the work gives the following summary of the work done and to be done:

Labor and material	$10,000 000.
Track being built, total	427 miles.
Through solid rock	100 miles.
Largest single fill	300,000 cubic yards.

Of above there was 60,000 cubic yards rock borrow to bring base of fill above water level.

Largest cut contained 40,000 cubic yards, and five of them this size.

Cuts widened, largest 12,000 cubic yards.

One granite tunnel 500 ft. long lowered and widened for second track without stopping traffic.

Granite rock moved	2,000,000	cubic yards.
Granite rock to move	80,000	"
Earth moved by contractors	1,000,000	"
Earth moved by train	2,800,000	"
Earth to move by train	2,191,000	"
Tunnel driven	1,069	ft.
Ballast distributed	548,000	cubic yards
To be distributed	727,000	"
Track laid	235	miles.
To lay	190	"
Ties used	681,500	
Still required	551,000	
Bridges	47	steel.

Spans, 15 to 200 ft. in length. Lattice and through girders, deck and half-deck, 12 erected, 35 to be erected. Concrete and stone arch culverts, 32; all in but 2. 29 muskegs that caused or likely to cause trouble. 10 diversions, 70 miles.

Filtration Plants on Western Lines.—An inspection of the filtration plants erected at Medicine Hat, Stobart, Arrowfoot, Irvine, Sask., and Calgary, Alta., shows that they are working satisfactorily and are serving the purpose for which they were erected, viz., the supplying of water for the locomotives which will not encrust the boilers. The filtration plants were installed under the charge of H. B. Lake, the company's chemist at Winnipeg.

Winnipeg-Souris Line.—The work of relaying the line between Winnipeg and Souris, Man., 159 miles, is reported to be progressing rapidly. The new rails are of the same type and weight as are used on the main line. The work, it is expected, will soon be completed.

Saskatoon.—We are advised that it is expected that the company's line between Lanigan and Saskatoon, Sask., will be opened for traffic June 15. Ballasting work has been in progress for some time, and arrangements are being made for a public celebration. The bridge over the Saskatchewan River was expected to be completed about May 15, so as to enable the track to be laid right into Saskatoon, where a large and commodious station has been erected to accommodate the traffic expected. A 10-stall roundhouse is nearing completion, and a machine shop building will be erected by the fall. McDiarmid & Co. have the contract.

The taxpayers, by a vote April 30, passed a number of by-laws, including one making a grant of $20,000 towards the C.P.R. bridge. The first train passed over the new bridge into Saskatoon May 14.

Moose Jaw Northwesterly.—In connection with the reports of the cessation of construction on the branch northwesterly from Moose Jaw, Sask., we are officially advised that grading has been completed for 65 miles and track laid for 18 miles from Moose Jaw.

The question of the construction of this line was brought before the House of Commons, May 1, by W. E. Knowles, who stated that the C.P.R. had held a charter to construct the branch for some years; that 14 miles northwesterly had been constructed two years ago, and that no additional track had been laid since. In the summer of 1907 there was graded a further distance of 50 miles, and the Second Vice-President informed a deputation officially the same year, that track would be laid on that 50 miles, and grading would be done for a further distance of 70 miles. Mr. Knowles stated that from that day not another yard of steel had been laid, or bit of grading done, although the contract for the 70 miles of grading had been let. Trusting to the promise given settlers had gone into the country, so that there were now small communities from 50 to 150 miles along the route of this projected line without any railway accommodation whatever. He had received a petition signed by 300 settlers in the vicinity of Tullisville, at the elbow of the South Saskatchewan River, asking for the construction of the railway. Mr. Whyte had stated that one reason why the work had not been gone on with was because the company could not get ties. The total length of the line from Moose Jaw to Lacombe was about 500 miles, of which track had been laid on the 14 miles at the Moose Jaw end, and on 100 miles on the Lacombe branch of the Calgary and Edmonton Ry. The Minister of Railways, in reply, expressed regret that any settled portion of the country should be at such a great distance from a railway. It was fair to say that the past year had been a very discouraging one for railways, owing to the fact, among others, that they found it very difficult to finance their present undertakings. The matter would receive the consideration of the Department.

Esquimalt and Nanaimo Ry.—The work of improving the E. & N. R. roadbed between Victoria and Nanaimo, B.C., will be gone on with during the current year. The expenditures authorized will run into $125,000, and the work to be done will include the replacing of wooden trestles and bridges with permanent steel structures, the more important of the bridges being those across the Chemainus and Cowichan rivers. Most of the work will be done on the stretch of the line between Ladysmith and Nanaimo, where the bridges are older than those nearer Victoria. About 40 miles of new fencing will be put up during the year.

In Victoria, work has been started on the extension of the main line tracks to the site of the new freight shed. Three new tracks will be laid in the new yards. The old Albion works have been removed, and the site cleared for the new yard and freight shed.

R. Marpole, General Executive Assistant at Vancouver, stated, after a recent inspection of the work, that the construction of the new line from Nanaimo to Alberni was proceeding satisfactorily. Work was being gone on with on the first 14 miles, and clearing was in progress for several miles in addition. No further contracts had been let.

Work has been started on the clearing of a considerable acreage in the vicinity of Ladysmith, and a project is under consideration for the reservation of a fish and game preserve on the Nanaimo-Alberni line.

Fire Extinguishers on Passenger Coaches.

The Board of Railway Commissioners passed the following order 4685, May 5: In the matter of the application of the C.P.R. Co., under section 29 of the Railway Act, for an order to amend order 3238, of July 3, 1907, requiring railway companies in Canada, subject to the jurisdiction of the Board, to equip passenger coaches with two fire extinguishers. Upon the hearing of counsel for the company, and what was alleged, and upon the report and recommendation of the Inspector of Railway Equipment and Safety Appliances, it is ordered that the said order be varied to permit the railway companies referred to in the order to equip their passenger coaches with one fire extinguisher instead of two, as required by the said order. That, unless the Board further directs, the equipment of the said passenger coaches with one fire extinguisher shall be taken to be and deemed a compliance with order 3238, that the said order be, and it is hereby amended by striking out the words "framed and," in the sixth line of par. 1, and the words "and recharged," in the second line of par. 2.

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TORONTO, Oct. 18, 1907.
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A. GARDNER & CO.,
Contractors.

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"Mixer has given entire satisfaction."
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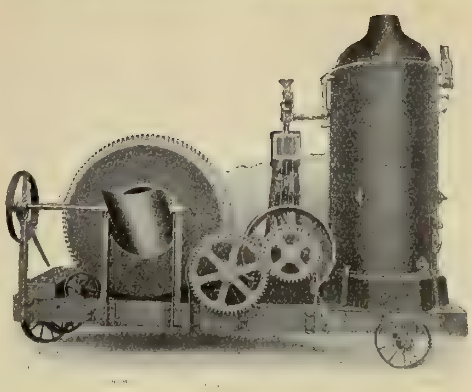

OPINIONS

FREDERICTON, Oct. 15, 1907.
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WILLARD KITCHEN CO.,
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MONTREAL, Oct. 16, 1907.
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EVERY USER SATISFIED **EVERY USER DELIGHTED**

Ransome Concrete Mixers

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WE NOW CAN OFFER AN EFFICIENT HAND MIXER—6 CUBIC FEET CAPACITY—JUST THE MIXER FOR SMALL CONCRETE WORK—INEXPENSIVE AND EASY TO OPERATE—PARTICULARS UPON REQUEST

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Unequalled for all kinds of cutting tools. The best steel makes the best tools, that is the reason that Hudson Tools will run faster and wear longer than any other high speed tools.

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The time your men will save in grinding alone is the practical economy of Hudson High Power Steel. Complete line of Twist Drills, Milling Cutters, End Mills, Taper Bridge Reamers, Shell Reamers, carried in stock. All steel and tools guaranteed.

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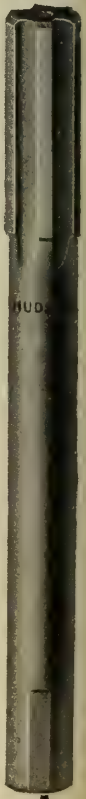

RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta Southwestern Ry.—In connection with the application for the incorporation of a company with this title to construct a line from the International boundary to Calgary, Alta., recent despatches from Cowley state that a survey party under the charge of —. Wilkinson has been for some time past running a line eastwards from Cowley towards Macleod, north of the Old Man River, in connection with the preliminary survey of a line from Michel to Calgary. As soon as the line from Michel up the Elk River has been completed, the report states the line from Lethbridge to Calgary will be started. A despatch from Frank, Alta., a few days later, states that Mr. Wilkinson is an engineer in the employ of Kenaston, Robertson, Lynch interests, who are the principal owners of the Canada West Co. at Taber, Alta., and that this company proposes to construct a line north and south, intersecting the Crow's Nest Pass Line at about Cowley, and connecting with the line to be built up the Elk valley on the B.C. side, from Michel to Calgary—a Great Northern Ry., U.S., project. (May, pg. 329.) See also Canada West Coal Companies Rd., Mar., pg. 179, and Nov., 1907, pg. 831.)

Algoma Central and Hudson's Bay Ry.—The report of the Engineer of the Ontario Department of Public Works for 1907, referring to the railway, says an extension of 1,464 ft. was made to the main line, and several sidings and spurs were constructed. At mileage 17, a 270 ft. siding was put in; an extension of 270 ft. was made at Loon Lake spur; a 495 ft. spur was made off Wabos passing track, mileage 35; a 100 ft. connection was made at mileage 38. From this connection the Superior Copper Co. has under construction a line to Superior mine, 4.02 miles, grading of which is about 80% completed; rails, fastenings, etc., are on the ground, and it is the intention to complete the line in the early spring. At mileage 45, a siding 5,280 ft.; at mileage 46, a siding 710 ft.; at mileage 46½, a siding 500 ft.; at mileage 47, a siding 910 ft., and at mileage 48½, a siding 425 ft. have been constructed. At the terminals at Sault Ste. Marie, connections have been made with the dynamo room of the pulp mill building, 1,328 ft.; with the car shops 280 ft., and with the saw mill 340 ft. Permanent steel spans on concrete abutments have been erected at mileages 34.9, 38.5, and 51, to replace wooden trestles. At mileage 24.3 a 12 ft. concrete arch was put in and embankment made up to grade to replace temporary wooden trestle. The main line between mileage 69 and the junction with the Michipicoten branch, a distance of about 101½ miles, is graded and partly bridged. (April, pg. 243.)

Atlantic, Quebec and Western Ry.—Subsidies at the rate of 4,000 acres of land per mile, not convertible into money, were voted last session of the Quebec Legislature, to aid in the construction of the first 50 miles of the projected railway from Gaspe Basin, passing through the interior of Gaspe peninsula, towards Causapscal, a station on the I.C.R.; and for the construction of 80 miles of line, following the shore as nearly as possible, to Gaspe Basin. These subsidies are in lieu of those voted in 1906. In connection with the latter, the subsidy voted was for a line of 100 miles from Paspebiac to the terminal point of the old Baie des Chaleurs Ry. (Atlantic and Lake Superior Ry.), which has recently been acquired by the A.Q. and W. Ry., to Gaspe Basin, and of which line there has been constructed 20 miles from Paspebiac to Port Daniel. (May, pg. 329.)

Brandon Transfer Ry.—Application is being made at the current session of the Dominion Parliament for an act extending the time for the construction of this projected railway, to connect the stations of the C.P.R., Canadian Northern Ry., Brandon, Saskatchewan and Hudson's Bay Ry. (Great Northern Ry., U.S.), and any other railway having a station in Brandon, Man. (Aug., 1906, pg. 449.)

Brockville, Westport and Northwestern Ry.—The projected extension of this railway beyond Westport, Ont., is again under discussion. The proposal is to construct a line from Athens, 17 miles from Brockville, thence across Bastard tp., bridging the Rideau River at Oliver's Ferry, and through Lanark county to Lanark village. Surveys have been made of this route, and reports show that it will tap a rich country north of Perth, which at present has no railway connection whatever. Not far from Lanark are the Playfair iron mines, which have been shut down for years. It is said that these mines would be reopened if there was railway communication. The new line would also give the country to be opened up direct connection with the C.P.R. to Brockville and the Thousand Islands. (Dec., 1906, pg. 711,) and (June, 1905, pg. 241.)

Canada-Minnesota Bridge Co.—See Duluth, Rainy Lake and Winnipeg Ry.

Cape Breton Ry.—See Cape Breton railways.

Cape Breton Railways.—At the recent session of the Nova Scotia Legislature the necessity of railway extension in Cape Breton Island—the northeastern portion of the Province—was discussed. It was pointed out that through the legislation introduced 15 years ago, when the Whitney interests were brought to the Province, the coal output of the island had increased from 800,000 to nearly 4,000,000 tons a year, and the great steel industry had been brought into existence. Investigations had shown that there were a billion tons of coal as yet untouched, and that the Wabana iron ore deposits were estimated at 250,000,000 tons. This assured the future of the Sydney and Sydney Mines steel plants. Limestone was another important element in the manufacture of iron, and of this there was a large supply of excellent quality in the Bras d'Or district. The population of the island had doubled within the past ten years, and some $50,000 000 or $60,000,000 were now invested in industrial enterprises in Cape Breton County alone. Railway construction had been promoted on the mainland so that there were now 1,100 miles of line there, while there were only 270 west on the opposite side of the Strait of Canso. There had been contributed towards railway development on the mainland from the provincial treasury $6,065,000, and only $474,000 towards railways on the island. The investment on Cape Breton had been a good one, for the whole amount, principal and interest, had been repaid to the Province, while, with the exception of a few miles in Cumberland and Pictou, the railway system on the mainland, which had been assisted by the Government, remained a burden on the provincial revenues. The Government had voted $5,000 a mile towards the extension of the Cape Breton Ry. from St. Peter's to Louisburg, and a subsidy for a coal railway of well-determined value from St. Rose to Orangedale. For the development of the island, it was urged that a line should be constructed through the Morien, Lingan and Glace Bay coal fields, and another through the limestone areas on the south side of the Bras d'Or lakes. The petition of the islanders presented to the House asked that the Government should give the same assistance for railway construction in the island as it had given to the Halifax and South-Western Ry., and had voted for the Halifax North-Eastern Ry. The Premier stated that just as soon as the project assumed concrete form the Government would take steps to deal with it, but at present there was no company seeking a subsidy for a line in the southern part of the island. (See Cape Breton Ry., Mar., pg. 179, and Mabou Ry. and Coal Co., Oct., 1907, pg. 743.)

The Premier subsequently announced that the Government was willing to offer to a bona fide company undertaking to construct and operate a railway in Cape Breton, along the routes indicated, such reasonable terms as should secure the construction of the line, and would recommend that the Dominion Government grant a subsidy on the usual terms. The Sydney, N.S., City Council, May 13, passed a resolution endorsing the construction of the lines referred to, but suggesting that they be built as part of the Intercolonial Ry. system, and that the Cape Breton Ry. be taken over by the Dominion Government.

Central Ontario Ry.—The Engineer of the Department of Public Works for Ontario, in his report for 1907, states that 15 miles of new line from Bancroft to Maynooth had been opened for traffic during the year. An additional distance of 10 miles was under construction. The clearing had been done upon the whole distance. The grading had been done on eight miles and two miles of track had been laid. The construction would be completed during the season of 1908, and a further mileage, it was expected, would be located. (Mar., pg. 179.)

Crow's Nest and Northern Ry.—We are advised that the surveys for this projected line have been completed, and that contracts for cutting the right-of-way were expected to be let early in May, and a contract for the construction about 30 days thereafter. The line will start about a mile west of the Crow's Nest station of the C.P.R. Kootenay Division, and follow up the north fork of Michel Creek to near Grave Creek. The line is for the purpose of serving several coal companies located on the north fork of Michel Creek, among them being the Crown Coal and Coke Co. and the Michel Coal Mines, Ltd. It is proposed to proceed with the construction of 15 miles of the line this summer, and to continue the balance of the work as the development of the properties demands. R. G. Belden, Spokane, Wash., has charge of the letting of the contracts. (May, pg. 329.)

Delaware and Hudson Co.—The Quebec Legislature at its recent session voted a subsidy at the rate of 2,000 acres of land per mile, not convertible into money, to the Quebec, Montreal and Southern Ry., which is one of the company's lines in Canada, for a line of 107 miles from Yamaska in the direction of Levis; and a subsidy at the same rate for a branch from the main line at Becancourt to the St. Lawrence River, a distance of not more than four miles. (See Quebec, Montreal and Southern Ry., Mar., pg. 183.)

Detroit River Tunnel.—An investigation is being made by H. S. Clements, M.P. for West Kent, according to a Detroit press report, into charges that the Butler Bros.-Hoff Co., contractors for the Detroit River tunnel had been permitted to take dutiable material into Canada to the value of over $200,000, without paying duty. A. B. Drake, Windsor, is said to be assisting Mr. Clements, and Hon. R. F. Sutherland, Speaker of the House of Commons, is attorney for the contractors. Mr. Drake is quoted as saying that the Dominion Customs officials granted the freedom from

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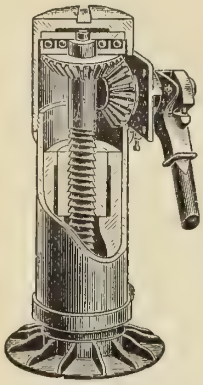

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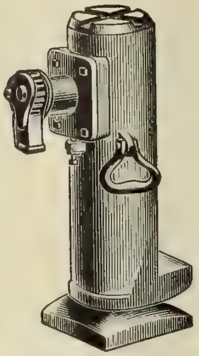

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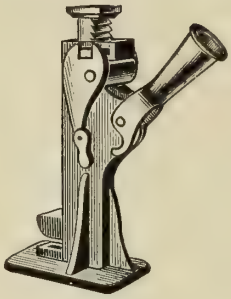

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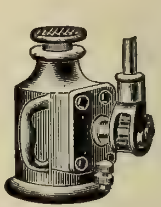

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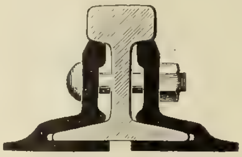

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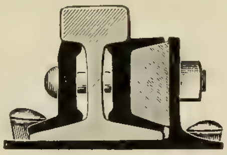

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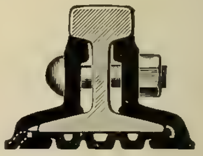

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duty, and that the sum involved would amount to over $200,000. The contractors started work on the tunnel in Aug., 1906. One of the first steps taken by the contractors was to send an emissary to Ottawa to adjust the matter of customs on supplies, tools and working materials. The upshot of his efforts was a concession from certain members of the Government allowing the contractors to take into Canada, duty free, all material which was to form a permanent part of that section of the tunnel extending from the river's edge to the open cut where the inclosed tunnel ends, a distance of some 3,800 ft. But this agreement, it is stated, was to be a reciprocal one, and was to be made only on condition that the U.S. Government allowed similar concessions for Canadian goods. The U.S. Government allowed not one iota, but in spite of the failure of the reciprocal scheme, not a cent's worth of duty has been paid on the U.S. products that have gone into the Canadian side of the tunnel. (May, pg. 329.)

Duluth, Rainy Lake and Winnipeg Ry.—The first train over this line ran into Fort Frances, Ont., over the Canada-Minnesota Bridge, and the Canadian Northern Ry., April 28. The D., R.L. and W. R. extends from Virginia to Rainer, Minn., 94 miles, and connection is given with Duluth over the Duluth, Missabie and Northern Ry., 74 miles. Surveys have been made for an independent line between Virginia and Duluth, but nothing has been decided as to construction. At Rainer the line connects with the Canada-Minnesota Bridge, constructed jointly by the D., R.L. and W.R., and the Canadian Northern Ry., and on the Ontario side of the bridge the C.N.R. constructed a spur line giving connection with its terminals in Fort Frances. The bridge crosses the Rainy River about three miles east of International Falls, and is a single track structure, composed of eight 40 ft. deck plate girder spans, and a roller lift bridge with one arm about 125 ft. long, across the navigable channel. The principal owners of the D., R.L. and W.R. are Cook and O'Brien, lumbermen, for the development of whose limits the construction of the line was originally started. The arrival of the first train in Fort Frances was celebrated by a public dinner, at which there were present officers and officials of the D., R.L. and W.R., the Canadian Northern Ry., and the Rainy River Navigation Co., as well as merchants and others interested in transportation matters from Duluth, Fort William and other places.

The first train was run through to Winnipeg, May 8, and it is understood that the permanent train service will be put in operation June 1, a through freight and passenger service being arranged between Duluth and Winnipeg. A daily passenger train will be run each way, leaving Winnipeg and Duluth in the evening, and making the 378 miles between the two points during the night. A new route between Fort William and Duluth is also opened up, the distance being about 400 miles, so that when navigation closes, a shorter route will be available than has hitherto been the case. In time a speedier route will be available by the construction of the line from Gunflint, the terminus of a C.N.R. branch, to which reference was made in our May issue, pg. 329. The line will serve a district in Minnesota which is developing rapidly, and it is also expected that it will secure a share of the through east and west traffic, upon the opening of the Wisconsin Central Ry. extension into Duluth, which will give a Chicago connection. (Nov., 1907, pg. 829; see also Canada-Minnesota Bridge Co., May, pg. 329.)

Ha! Ha! Bay Ry. Co.—At the last session of the Quebec Legislature an act was passed incorporating a company with this, title with power to construct a railway to be operated by steam or electric power or both, from a point on the Quebec and Lake St. John Ry., between Jonquieres station or Roberval, and its terminus in the town of Chicoutimi, to Ha! Ha! Bay, in the county of Chicoutimi; also two branch lines not exceeding 10 miles each in length, one northward to the Chicoutimi pulp mills, and another southward to Lake Kenogami; and a third branch from St. Alphonse to St. Alexis, about four miles, "connected with the main line, and to be considered to all intents and purposes as forming part thereof, and enjoying all the rights, powers and privileges connected therewith." Power is also given to construct telegraph and telephone lines along the railway. The provisions of the law now in force with regard to railways in the province, and their amendments, except par. 11 of article 5132 and par. 16 of article 5134 of the Revised Statutes of Quebec are made applicable to the company. The company's capital is fixed at $600,000; it may issue bonds and other securities; its head office shall be at Bagotville, Que., and the provisional directors are: A. Lepage, W. Levesque, J. A. Trembly, E. McLean, Rev. H. Cinion, Bagotville, Que.; Lieut.-Col. B. A. Scott, P. A. Choquette, E. F. de Varennes, Quebec; E. A. Dubuc, Chicoutimi, Que.

The Legislature at its recent session voted a subsidy of 4,000 acres of land in aid of the construction of a line 20 miles in length from Jouquieres in the direction of Ha! Ha! Bay, in lieu of a subsidy voted in 1906, which subsidy is available for any company having a charter to construct a line in the same territory. (Jan., pg. 21. See also Chicoutimi and North Eastern Ry., July, 1904, pg. 231.)

Hampton and St. Martin's Ry.—See St. Martin's Ry.

Hebertville to St. Joseph d'Alma.—The Quebec Legislature at its last session voted a subsidy of 4,000 acres of land per mile, not convertible into money, to aid in the construction of a line from Hebertville, in Lake St. John county, towards St. Joseph d'Alma, a distance of about 10 miles.

Indian River Ry.—At the last session of the Quebec Legislature a subsidy of 4,000 acres of land per mile, not convertible into money, was voted for a line from the north end of Lake Megantic towards the south end of the lake to the International boundary, in lieu of the subsidy voted in 1904. (Oct., pg. 741.)

Intercolonial Ry.—Replying to a question in the House of Commons April 27, the Minister of Railways said the length of the branch line from North Sydney to Sydney Mines was 2.7 miles; it had cost to date $136,479.02, the cost of the right-of-way being $24,442.69, and the amount paid for land damages was $4,238. The amount of claims outstanding was $9,015, and these were in process of settlement.

Replying to another question on the same date, the Minister of Railways said the matter of the construction of a new station at Truro, N.S., was under consideration. Large expenditures have to be made in connection with the new freight yard, etc., there, and the whole question of accommodation was being considered. (May, pg. 231.)

International Ry. of New Brunswick.—The question of the Provincial Government guarantee of the bonds of this railway, which was formerly known as the Restigouche and Western Ry., has been investigated by the Accounts Committee. The first guarantee was on bonds to the extent of $150,000, but under the act passed in 1906 these bonds, and the mortgage given to secure them, were cancelled, and a new guarantee was provided for. This was a guarantee at the rate of $8,000 a mile of the first mortgage bonds of the company, and the usual subsidy of $2,500 a mile to be secured by a second mortgage, but upon which no interest was to be charged for seven years. In Feb. the Government considered a report on the work performed by the company, which showed that the expenditures on account of construction to Dec. 31, 1907, amounted to $1,207,019.77, and on this report the Provincial Secretary recommended that the Province guarantee the bonds of the company to the extent of $400,000, which amount was to include the original guarantee of $150,000, of which bonds were to be handed over by the assignees of the Restigouche and Western Ry. and cancelled. This arrangement was ratified by order-in-council, and the Provincial Secretary and Attorney-General were given power to carry out the arrangement. The original bonds and mortgage were held by the Eastern Trust Co. The International Trust Co. made arrangements with the Royal Trust Co. to take over the mortgage, and also to take over the new bonds. The exchange and cancellation of bonds having been effected, the Government guarantee was placed upon the bonds to secure the Royal Trust Co. by the Provincial Secretary. The matter is still under investigation.

Joliette and Lake Manuan Colonization Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 4,000 acres of land was voted in aid of the construction of about 60 miles of this projected railway from Joliette in the direction of Lake Manuan, in lieu of the subsidy voted in 1906. (Feb., 1905, pg. 49.)

L'Avenir and Melbourne Ry.—The Quebec Legislature at its last session passed an act incorporating a company with this title for the purpose of constructing a railway or tramway from Richmond or Melbourne, following the banks of the St. Francis River to Drummondville, with the right to build bridges across the river and to construct branch lines wherever necessary to facilitate the working of its main line, such branch lines not to exceed in any one instance 25 miles in length. The act provides that the railway shall be operated by means of trains as on a steam line, or of separate cars as on tramways, and the traction shall be effected by electricity, steam, gasoline or in any other manner that may seem most advantageous to the company. The company may acquire water powers along its line for its use, and may amalgamate with any railway company whose line it may cross or join. The capital is fixed at $300,000, but power is given to increase to $1,000,000 and bonds may be issued. The head office of the company is to be at L'Avenir, Que., the provisional directors being: B. E. Reed, G. E. Bogie, Durham tp., Arthabaska county; Jos. Laferte, M.L.A., Grantham tp., Arthabaska county; P. S. G. Mackenzie, K.C., M.L.A., Melbourne, Que.

Little Nation River Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 3,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from between Thurso and Montebello, on the left bank of the Ottawa River, thence to Cheneville, and northwards to Lake Nominingue, near the C.P.R., not exceeding 30 miles. (May, pg. 331.)

Lotbiniere and Megantic Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 2,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Lyster station, running towards Lime Ridge, in the county of Wolfe, a distance of about 60 miles, in lieu of the subsidy voted in 1906. (See Quebec, Eastern Ry., Feb., pg. 99.)

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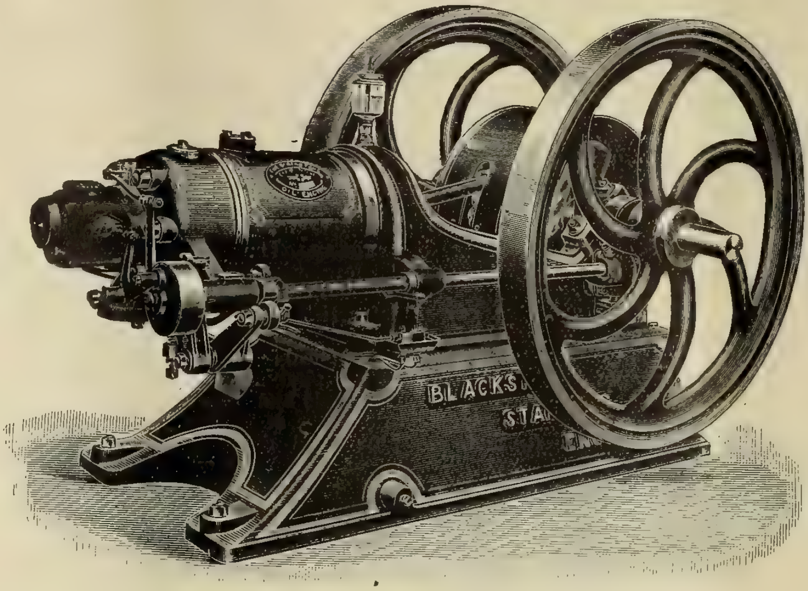

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Mabou Ry. and Coal Co.—See Cape Breton railways.

Macleod, Cardston and Montana Ry.—See Western Alberta Ry.

Manitoulin and North Shore Ry.—The report of the engineer of the Ontario Department of Public Works for 1907, says the work of extending the main line from mileage 13 had been gone on with, and the grading had been completed to mileage 13.92.

The Dominion Parliament at its current session passed an act extending the time for the construction of the railway for two years. A clause was inserted to the effect that if the company is to maintain its charter rights, it must expend $25,000 in construction work on the Manitoulin end of the line before the middle of July, and also satisfy the Board of Railway Commissioners of its intention to complete the rest of the line before the two years' extension of its charter privileges accorded expires. (Feb., pg. 99. See also Manitoulin Island, April, pg. 245.)

Replying to the question whether "the Government or any member thereof had given a pledge to the effect that if the present holder of the M. and N.S.R. charter fails to carry out the building of the road in the proper time, the Government will take the matter in hand and build a railway from Manitoulin Island to connect with the C.P.R.," the Premier of Ontario said in the Legislature recently "The Government is not in the habit of giving pledges upon any subject of public policy."

Matane and Gaspe Ry.—At the last session of the Quebec Legislature a subsidy of 4,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Ste. Flavie, on the I.C.R. towards Matane, for 37 miles, in lieu of the subsidy voted in 1906, for 30 miles from St. Octave de Metis to Matane.

An action has been entered in the Superior Court at Montreal, on behalf of H. J. Lyons, contractor of that city, for $1,000,000 damages against the company, and Jas. Mitchell, a contractor of New York. The object of the action, it is said, is to prevent the company signing a contract for the construction of the line with N. S. Mitchell. (Mar., pg. 183.)

Metebetchouan Co.—At the last session of the Quebec Legislature a subsidy of 1,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Lake Bouchette to St. Andre on the Metebetchouan River. (Aug., 1907, pg. 563. See also Quebec and Lake St. John Ry., Mar., 1904, pg. 81.)

Orford Mountain Ry.—The Quebec Legislature last session granted a subsidy at the rate of 2,000 acres per mile, not convertible into money, in aid of the construction of the following lines: From Mansonville to the International boundary, 3.12 miles, for 7.54 miles of the line between Bolton and Mansonville; from Windsor Mills to Brompton Falls, eight miles; from the Melbourne road crossing to the village of Melbourne, 3.50 miles; and from a bridge on the main line to Lake Bonallie, on the south side, in lieu of the subsidy voted in 1905. (May, pg. 333.)

Pontiac and Interprovincial Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 4,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Waltham station, on the old Pontiac Pacific Junction Ry. (C.P.R. branch line), to Ferguson's Point, Pontiac county, about 20 miles, in lieu of the subsidy voted in 1906. (July, 1904, pg. 235.)

Pontiac Central Ry.—The House of Commons at the current session has passed an act authorizing an extension of time for the construction of a line in the province of Quebec, authorized by the Quebec Legislature, and giving permission to extend the line along the valley of the Nottaway River to East Main River, and southerly to Brockville. Some objection was taken to the proposal on the ground that the method of obtaining a declaration that the projected railway was for the general advantage of Canada, by proposing to extend into another province, was becoming too common. The Minister of Railways held over the bill for some time for consideration, but finally allowed it to pass. The southerly extension of this line from Bryson, Que., to Brockville, would pass through or near Lanark, and Athens, which points, it is suggested, will be served by a branch line of the Brockville, Westport and Northwestern Ry. (May, pg. 333.)

Prince Edward Island Ry.—In connection with the claim of M. J. Haney for $390,000 on account of work on the construction of the Hillsborough Bridge, on the Murray Harbor branch of the P.E.I. Ry., the Minister of Railways stated in the House of Commons April 24, that the arbitrator had awarded $164,000. It was undesirable that the claim should be settled by the present Deputy Minister and Chief Engineer, as he had already had it under his consideration when he was acting as chief engineer for Mr. Haney, consequently the matter was left to C. Schrieber, the Department's former Deputy Minister and Chief Engineer. Mr. Schrieber's powers were extended so that he could deal with the question of equity as well as with those matters which had come before him directly as Chief Engineer for the department. A supplementary estimate for the amount of the award would be asked for at a later date, when the whole matter could be discussed.

Tenders are under consideration for the construction of a spur line to the ballast pit at Surrey, P.E.I. (May, pg. 333.)

Quebec Central Ry.—We are advised that there has not been anything definitely settled with regard to the further extension of the line beyond St. George, Que. This branch as projected is for the purpose of linking up the Q.C. Ry. with the Temiscouata Ry., which is owned by largely the same interests. At the recent session of the Quebec Legislature a subsidy of 3,000 acres of land was voted to aid in the construction of 30 miles of this projected branch, the route being described as following the Famine River to its source near Langeville, and thence following the St. Jean River across the counties of Beauce, Dorchester, Bellechasse, Montmagny, L'Islet, Kamouraska and Temiscouata, to Cabano, on the Temiscouata Ry. The subsidy is not to be converted into money, and construction is to be gone on with within two years. (April, pg. 245.)

Quebec and New Brunswick Ry.—The Dominion Parliament at its current session passed an act extending the time for the construction of this projected railway, and also providing that the company may construct a line from St. Charles Junction, St. Anselme or Chaudiere Junction, on the Intercolonial Ry., to a point on the International boundary between Quebec and Maine, in the 13th tp. of that state; and by adding the words "or a point on the G.T. Pacific Ry. in the valley of the River St. Francis," after junction in sec. 7, chap. 75 of the act of 1900. The company asked to be authorized to make a connection with any railway in Maine, and subject to the approval of the Board of Railway Commissioners, enter into such agreements as may be necessary for that purpose, or may construct or aid in the construction of such railways or portions thereof as part of the continuous line of the company's railway, but this was struck out. The company is also authorized to enter into agreements with the G.T. Pacific Ry. or any other railway, in addition to others previously specifically mentioned.

In the discussion in committee in the House of Commons, it was stated that there had been about three miles of grading done on the line, and the reason why the work was not continued, was that it was expected that the Transcontinental Ry. Commissioners would take over part of it. When the Eastern Division of the National Transcontinental Ry. was surveyed, it was found that only a very short distance of the route would be required, and it was necessary to have the time for construction extended to complete the arrangements. The company now proposed to go on with construction. The projected line would have a length of 130 miles, and between Connors and Chaudiere Junction would parallel the National Transcontinental Eastern Division for three or four miles. (May, pg. 333.)

Quebec, Montreal and Southern Ry.—See Delaware and Hudson Co.

St. Martin's Ry.—This railway, formerly called the Hampton and St. Martin's Ry., was reopened for traffic May 7, having been closed for several weeks to permit of repairs being made. The line has been given a thorough overhaul, the bridges over the numerous streams and ravines having been strengthened. The largest of these structures is that over the Hammond River at Upham, N.B. This bridge has been practically rebuilt and strengthened by the addition of two reinforced concrete piers; it has a span of 180 ft. The company has secured 15,000 new ties, which will be placed during the current season. During 1907 there were placed in the track 12,000 new ties. Other improvements are contemplated, including the erection of a station-house at St. Martin's, and the extension of the line to the wharf there, a distance of about half a mile. W. E. Foster, St. John, N.B., is President. (Jan., 1907, pg. 3.)

Springfield Ry.—The Davison Lumber Co propose to extend the main line of its lumbering railway, by adding five miles, during the summer. The company's mills are at Bridgewater, N.S., and the line extends from the mills to the timber limits at Springfield. Oct., 1906, pg. 585.)

Temiskaming and Northern Ontario Ry.—It is expected that the line will be completed this season as far as the junction with the National Transcontinental Ry. With the completion of the bridge across the Watybeag River, 69 miles north of Englehart, Ont., or 208 miles from North Bay The erection of the bridge at Driftwood is being proceeded with, and when this is completed the steam shovels will be taken across to work on some heavy cuts. The Commissioners have awarded the following contracts: O'Boyle Construction Co., Sault Ste. Marie, Ont.—To paint the stations between North Bay and New Liskeard; to erect a brick office and storehouse at Englehart; and two water tanks. J. K. McConnell, Sturgeon Falls, Ont.—Station buildings at Moose Lake and Dane; and five frame houses. L. C. Wideman, Guelph and Englehart—Waiting room at Thoreau. Tenders are under consideration for a freight shed at Haileybury; an ice house at Englehart; a 40 ft. concrete arch, three 10 ft. concrete culverts, one 5 ft. culvert and three abutments at various points.

The office building at North Bay has been completed and the operating officials moved into it May 1. It is constructed of cut limestone, with partitions and floors of concrete, and oak finishings with tiled roof. There are large vaults on the first and second floors, and half the basement has been set aside for storage purposes.

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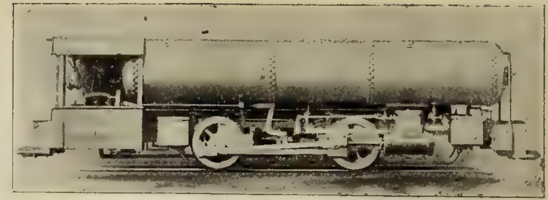

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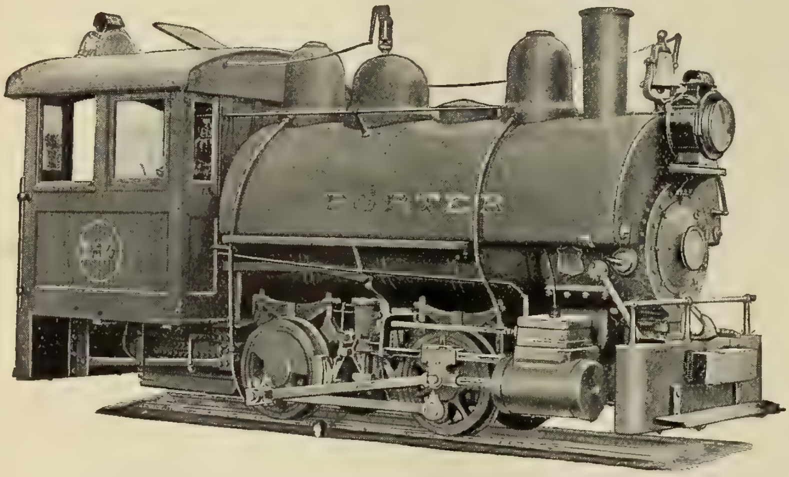

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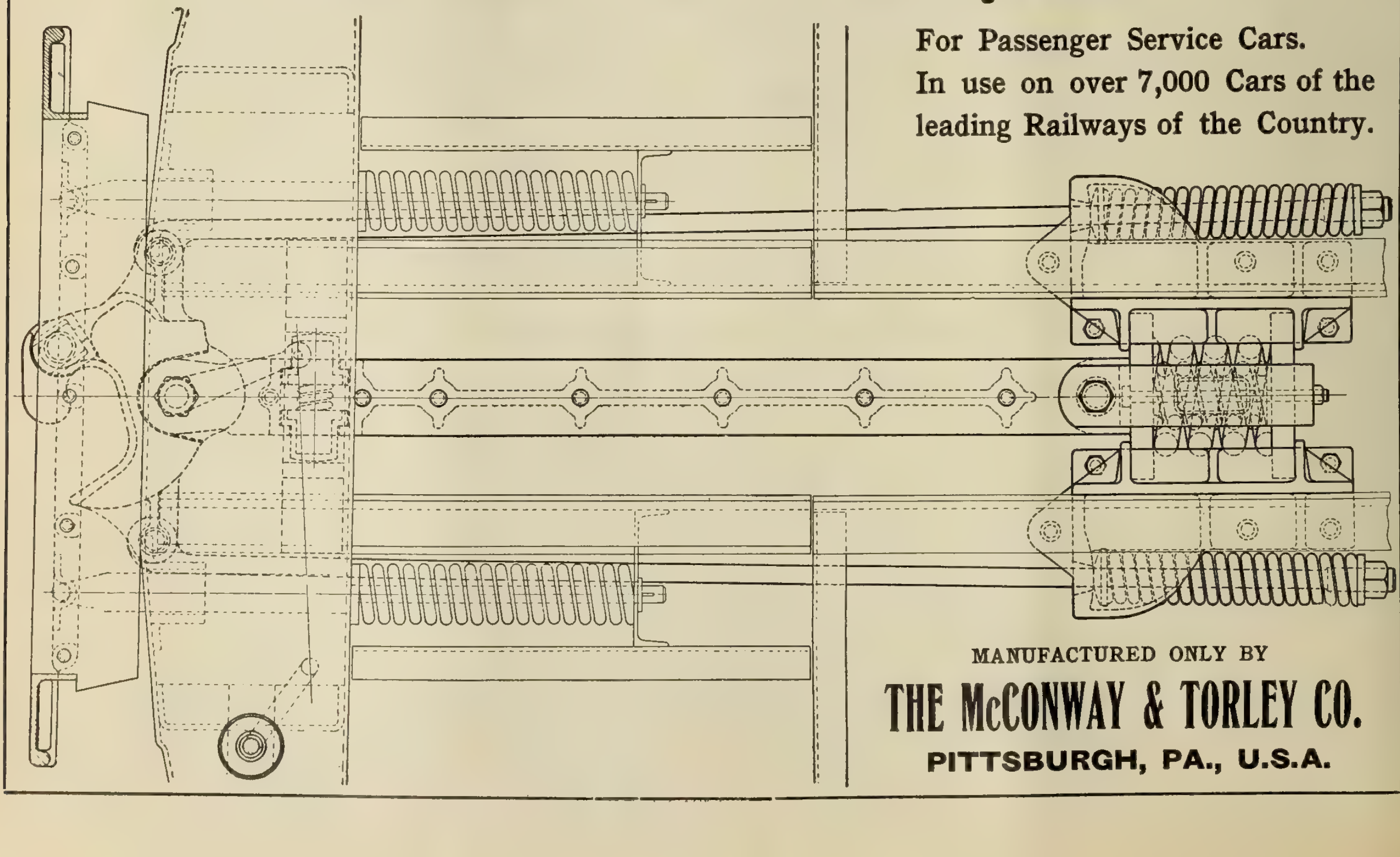

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At Englehart a roundhouse, machine shop and other divisional buildings are practically completed. The roundhouse, which will have a capacity for eight locomotives, is 225 by 90 ft.; the machine shop, 60 by 65 ft.; the boiler house, 30 by 40 ft.; and the coal house, 12 by 20 ft. Besides these buildings there is a small engine room, the engine being used for heating purposes. The coal chute has a total height of 65 ft. from the ground to the roof, and 35 ft. from the ground to the rail; the track is 800 ft. long, the gradient being 6½ inches in 14 ft.; there are 34 chutes, 17 on each side.

A proposal has been made for the extension of the Charlton branch to Elk Lake, Ont., in which district there is a good deal of development going on. (May, pg. 335.)

Trans-Canada Ry.—The Quebec Legislature last session voted a subsidy at the rate of 4,000 acres of land per mile, not convertible into money, in aid of the construction of 30 miles of railway from Roberval, the terminus of the Quebec and Lake St. John Ry., on Lake St. John, towards the west in the direction of James Bay, in lieu of the subsidy voted in 1906. This mileage is covered by the charters of the Trans-Canada Ry., and the Quebec and James Bay Ry., both of which are owned by the same interests. These companies have done considerable surveying and some small amount of grading.

At the current session of the Dominion Parliament an act has been passed extending the time for the commencement of construction of the projected line for two years, and the time for completion for eight years from the passing of the act. (Feb., pg. 101.)

Western Alberta Ry.—The Dominion Parliament at its current session passed an act extending the time for the commencement of construction for two years and the time for the completion of the line for five years. When the bill was before the House of Commons, opposition was offered to its passage on the ground that although the company was given a charter of incorporation in 1898, and a subsidy was voted in 1899, both of which had been extended from time to time, nothing had been done. Other companies, notably the Macleod, Cardston and Montana Ry., held charters covering the construction of lines in the same territory, and might be induced to proceed with construction without unnecessary delay in the event of the Western Alberta Ry. Co. being refused further extension of time. In the course of the discussion it was pointed out that a railway was very badly needed in this section of the country. The line projected by the W.A.R. Co. will extend from the International boundary to the C.P.R. Crow's Nest Pass line, passing through or near Cardston, Alta., about 50 miles. The line will run parallel with the Rocky Mountains, through a good farming district. The Cardston section of the country at present had railway connection with Lethbridge, by the Alberta Ry. and Irrigation Co.'s line, whereas if such a line as this was constructed there would be a saving of about 90 miles in getting the produce of the district to the natural market in British Columbia. It appeared from the discussion that the subsidy for the construction of this line was renewed to the Western Alberta Ry. in 1906, the year following the last renewal of the charter, and that the subsidy was still available for this company. It was stated that the company was now in a position to arrange for construction, and would be prepared to enter into a subsidy contract with the Government under the subsidy act. Under all the circumstances it was decided that the charter should be renewed for a further period. (Feb., pg. 101.) See also Macleod, Cardston and Montana Rd. Mar., pg. 183.

Windsor, Chatham and London Ry.—The Dominion Parliament at its current session passed an act granting an extension of two years for the commencement, and of five years for the completion of this projected railway. (April, 1906, pg. 195.)

◆

June Birthdays.

Many happy returns of the day to—

Harry Abbott, ex-General Superintendent C.P.R., Vancouver, B.C., born at Abbotsford, Que., June 14, 1829.

Jas. Anderson, Manager Sandwich, Windsor and Amherstburg Ry., Windsor, Ont., born at Ayr, Ont., June 20, 1851.

F. F. Backus, General Freight and Passenger Agent, Toronto, Hamilton and Buffalo Ry., Hamilton, Ont., born at Rochester, N.Y., June 4, 1860.

Archer Baker, European Manager C P.R., London, Eng., born at York, Eng., June 21, 1845.

F. P. Brady, General Superintendent Lake Superior Division C.P.R., North Bay, Ont., born at Haverhill, N.H., June 22, 1853.

E. Callaghan, Agent Hamilton Steamboat Co., Toronto, born at Kingston, Ont., June 17, 1875.

W. H. Darcy, General Claims Agent C.P.R. Western Lines, Winnipeg, Man., born at Manorhamilton, Leitrim, Ireland, June 23, 1859.

A. E. Doucet, Division Engineer Transcontinental Ry. Surveys, Quebec, born at Montreal, June 9, 1860.

G. H. Eaton, Assistant Master Car Builder, C.P.R. Western Lines, Winnipeg, born in Staffordshire, Eng., June 9, 1860.

A. A. Goodchild, Auditor of Stores and Mechanical Accounts C.P.R., Montreal, born at Peckham, London, Eng., June 3, 1866.

H. W. Harding, Local Secretary Canadian Northern Ry., London, Eng., born there June 6, 1869.

F. M. Hawley, city ticket agent G.T.R., Cobourg, Ont., born at Campbellford, Ont., June 22, 1874.

E. J. Hebert, General Agent C.P.R. Passenger Department, Montreal, born there June 18, 1864.

Carl Howe, Manager Merchants Despatch and other fast freight lines, Buffalo, N.Y., born at Berrien Springs, Mich., June 11, 1870.

L. R. Johnson, Assistant Superintendent of Motive Power C.P.R. Eastern Lines, Montreal, born at Abingdon, Berks, Eng., June 22, 1855.

J. F. Jones, Superintendent St. Clair Tunnel, G.T.R., Port Huron, Mich., born at Prairieville, Ill., June 4, 1851.

L. K. Jones, Secretary Department of Railways and Canals, Ottawa, born at Port Hope, Ont., June 9, 1849.

A. C. Lytle, Superintendent and General Freight and Passenger Agent, Orford Mountain Ry., Eastman, Que., born at Hemmingford, Que., June 6, 1854.

W. R. MacInnes, Freight Traffic Manager C.P.R., Montreal, born at Hamilton, Ont., June 7, 1867.

E. H. McHenry, Fourth Vice-President New York, New Haven and Hartford Rd., and ex-Chief Engineer, C.P.R., born at Cincinnati, Ohio, June 25, 1859.

C. E. McPherson, General Passenger Agent C.P.R. Western Lines, Winnipeg, born at Chatham, Ont., June 7, 1861.

W. D. Matthews, director C.P.R., Toronto, born at Burford, Ont., June 22, 1850.

L. Mulkern, chief clerk, General Freight Agent Through Traffic C.P.R., Toronto, born at London, Ont., June 18, 1871.

F. Price, Superintendent Car Service G.T.R., Montreal, born there June 11, 1864.

Allan Purvis, Superintendent, district 4, Central Division, C.P.R., Souris, Man., born at Batavia, Java, June 29, 1878.

Jas. Stephenson, ex-Chief Superintendent G.T.R., Weston-Super-Mare, Somerset, Eng., born there June 2, 1837.

The Victorian State Railways.

The report of the Victorian Railways Commissioners, of which body T. Tait, formerly Manager of Transportation C.P.R., is Chairman, for the year ended June 30, 1907, has been issued. The Commissioners have the management of 4,316.11 miles of track, of which 3,731.82 are main tracks and 584.29 miles are sidings. There are 3,089.81 miles of single track, 303.44 miles of double track line, 2.45 miles with three tracks, 2.22 miles with four tracks, and 3.15 miles with six tracks. There are 81.60 miles of 2 ft. 6 in. gauge line, the remainder being 5 ft. 3 in., and 5.13 miles of electric railway.

The financial results for the year compared with 1905-06 are:

	1906–07			1905–06		
	£	s.	d.	£	s.	d.
Gross revenue....	4,012,641	8	4	3,787,619	0	8
Working expenses	2,076,672	14	7	1,999,023	0	6
Net revenue....	1,935,968	13	9	1,788,596	0	2
Net revenue Electric St. Ry. (1)	7,802	10	4	308	5	10
	1,928,166	3	5	1,788,904	6	0
Special expenditures and charges in reduction of extraordinary liabilities taken over July, 1903	165,749	7	10	117,542	10	9
Balance total net revenue....	1,762,416	15	7	1,671,361	15	3
Interest charges and expenses..	1,483,284	5	0	1,472,397	0	4
Surplus credited to consolidated revenue......	279,132	12	7	198,964	14	11

(1) The loss shown for the year 1906-07 was after providing for expenditure of £9,941, 2s. 2d. towards replacing damage by fire. The net revenue in 1905 06 was from May 7 to June 30, 1906, only.

The net revenue after payment of working expenses was the largest ever earned, and per mile of railway, viz., £570, and per traffic mile, viz., 3s. 10.30d.; the highest obtained for 19 and 28 years respectively, and was, including the electric street railway, equivalent to 4.86% on the railway debt of the state. In Nov., 1906, the rates for agricultural produce, including wheat and other cereals, were reduced to the extent of £35,000 a year. The rolling stock consisted June 30, 1907, of 497 locomotives, 1,233 passenger cars, 10,625 freight cars, and 494 vans, etc. The total train miles run was 10,035,914, against 9,392,069; passengers carried, 69,920,583, against 65,088,394; freight carried, 3,965,792 tons, against 3,676,017. Gross revenue per average mile open, £1,182, against £1,116; gross revenue per train mile run, 7s. 11.96d., against 8s. 0.79d. The expenses under the heads of transportation and traffic, way and works, rolling stock and general expenses, amounted to 4s. 1.66d. per train mile run, and were equal to 53.75% of the gross revenue, against 4s. 3.08d. and 52.78% in 1905-06.

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Natural Gas for C.P.R. Cars.—A press despatch from Medicine Hat, Alta., stated recently that natural gas from the wells there was being used in C.P.R. passenger cars on the Crow's Nest Pass line. We are advised that, so far, only experiments have been made, but that while these appear to be very satisfactory, no definite decision as to the use of the gas has been arrived at. The natural gas has been used in place of Pintsch gas in some of the cars equipped with incandescent mantel lighting and has been found satisfactory from an illuminating standpoint. Experiments are now being made to determine whether the natural gas is absolutely safe for lighting, and until these are completed the use of the gas will not be proceeded with. If, however, it should be decided to use it, it will be compressed into 10 atmospheres and carried in tanks underneath the cars in the same way as the Pintsch gas.

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WM. STITT,
General Passenger Agent, MONTREAL

C. B. FOSTER,
District Passenger Agent, TORONTO

MAINLY ABOUT PEOPLE.

R. H. Sperling, General Manager British Columbia Electric Ry., is in England for a holiday.

Dr. R. B. Struthers, who acted for many years as C.P.R. physician at Sudbury, Ont., died there May 14.

E. A. Evans, General Manager Quebec Ry., Light and Power Co., has returned to Quebec from Europe.

F. C. Annesley, private secretary to W. Mackenzie, Toronto, has gone to England for a couple of months.

A. E. Harper, of the Long Island Ry. staff, who died at Corona, N.Y., May 5, was a native of Toronto.

N. Curry, of Rhodes, Curry & Co., returned to Amherst, N.S., from a lengthened trip to Great Britain, at the end of May.

Lady Shaughnessy and family intend removing to their country residence, St. Andrews, N.B., this month, for the summer.

Sir Thos. G. Shaughnessy sailed from Liverpool, Eng., May 22, and arrived at Quebec on the Allan Line s.s. Virginian.

H. H. Hansard, law clerk Department of Railways, Ottawa, has retired from the civil service to engage in private practice.

Jas. Oborne, General Superintendent Ontario Division, C.P.R., Toronto, left Toronto May 14, for a holiday trip to Great Britain.

Miss C. E. Stout, daughter of W. S. Stout, President Dominion Express Co., Toronto, was married there May 12 to A. H. Montgomery.

Jas. T. McGregor, a sub-contractor on the G.T. Pacific Ry. in the vicinity of Fort William, Ont., has been married to Miss E. H. Olds.

Mrs. Humphry Ward, the English novelist, and Miss Ward, were guests of Sir Wm. and Lady Van Horne during their recent visit to Montreal.

H. Beatty, of M. Beatty & Son, dredge builders, etc., Welland, Ont., was slightly injured, owing to an automobile he was driving running into a ravine May 6.

R. Marpole, General Executive Assistant C.P.R., left Vancouver, B.C., May 20, for England, accompanied by Mrs. Marpole, C. Gardiner Johnson, and Mrs. Johnson.

W. Stitt, General Passenger Agent Eastern Lines, and W. T. Robson, Advertising Agent, C.P.R., attended the annual dinner of the Canadian Club, New York, May 14.

The total value of the estate of the late Lieut.-Colonel Henshaw, Montreal, director of the Montreal Street Ry., and other transportation companies, has been placed at $639,731.

Sir Wm. C. Van Horne, Chairman of the Board, C.P.R., returned to Montreal, May 7, from Cuba, where he had been in the interests of the Cuba Company, of which he is President.

L. P. Palmer, Commissioner of the Trunk Line Association's Passenger Department, died somewhat suddenly in New York May 1, aged 60. He had been engaged in railway work since 1863.

W. E. Hamilton, for many years connected with the C.P.R., and later with the Reid Newfoundland Co., is reported to have been appointed Traffic Manager of the Porto Rico Ry.

J. W. N. Johnston, General Passenger Agent Reid Newfoundland Co., is under treatment at Colorado Springs, Col., and recent reports state that his condition does not show much improvement.

W. Whyte, 2nd Vice-President C.P.R., and Mrs. Whyte, returned to Canada by the Empress of Ireland, arriving at Quebec May 22, after spending a short holiday in Great Britain and Southern Europe.

C. W. Mott, chief clerk in the freight claims department of the C.P.R., Montreal, has been presented with a gold watch by the congregation of the Anglican church, Montreal West, in recognition of his services as organist during the past ten years.

S. L. Shannon, Comptroller Intercolonial Ry., returned to Moncton, N.B., May 6, from Washington, D.C., where he had been attending a convention of the Association of American Railway Accounting officers.

The date of the banquet to be given by the Board of Trade, Toronto, to Sir Thos. G. Shaughnessy, President C.P.R., in connection with the opening of the Toronto-Sudbury line, has been fixed for June 15.

Sir Charles Fitzpatrick, Chief Justice of the Supreme Court of Canada, has been selected to act as representative of Canada and Newfoundland at the Hague tribunal, regarding the fisheries dispute with the U.S.

The marriage of Madame Nadeau, niece of J. U. Gregory, recently Agent of the Marine Department at Quebec, to J. A. Gagnon, of the Marine Department, Quebec, was recently announced to take place June 1.

J. G. Scott, General Manager Quebec and Lake St. John Ry., was entertained at a public dinner at Quebec May 26, as a mark of appreciation of the numerous valuable services he has rendered to the city and district.

F. L. Somerville, formerly Resident Engineer G.T.R., Toronto, and latterly practising as a consulting engineer in the city, is an applicant for the position of Superintendent of Queen Victoria Park, Niagara Falls, Ont.

Sir Thos. G. Shaughnessy was entertained at the House of Commons, London, Eng., May 14, to meet the Chancellor of the Exchequer, the President of the Board of Trade, and the Under-Secretary of State for the Colonies.

R. C. G. Gibride, locomotive foreman Central Vermont Ry., St. Albans, Vt., was married at Stratford, Ont., May 8, to Miss I. J. Preston. He is a nephew of W. D. Robb, Superintendent of Motive Power, G.T.R., Montreal.

J. E. Dalrymple, who has taken up the duties of his new position of Assistant Freight Traffic Manager of G.T. Pacific Ry. at Winnipeg, was entertained at dinner by the principal freight officials of the G.T.R. at the Canada Club Montreal, April 29

W. A. Pilcher, eastern railway representative of S. F. Bowser & Co., of Fort Wayne, Ind., and Toronto, was one of the twelve who lost their lives in the fire at the Aveline Hotel, Fort Wayne, May. 3. He was buried at his old home at Bellevue, Ohio.

Sir Percy Girouard, son of Justice Girouard, of the Supreme Court of Canada, has been appointed Governor and Commander-in-Chief of Northern Nigeria, West Africa, instead of High Commissioner, which position he has held for about three years.

Jas. Dunsmuir, Lieut.-Governor of British Columbia, and head of the Dunsmuir companies, one of which was, until purchased by the C.P.R., the Esquimalt and Nanaimo Ry., has been elected a director of the C.P.R., succeeding C. H. Mackay, New York, resigned.

Thos. Johnston, Chief Accountant Western Ry. of Havana, and formerly in the C.P.R. service, has been visiting Montreal. Mrs. Johnston and family were expected to reach Montreal from Europe at the end of May, and Mr. Johnston came from Cuba to meet them.

C. H. Reynolds, General Manager of the Pacific Cable Board since 1901, died at Lisbon, Portugal, May 22, aged 64. He had been in the service of the Telegraph Department of India from 1865 to 1895, during the last five or six years being Director-General.

W. McNab, Principal Assistant Engineer G.T.R., Montreal, and Vice-President American Railway Engineering and Maintenance of Way Association, was a guest at the American Railway Guild's annual dinner at New York, April 22, and replied to the toast of Canada.

Mrs. Arthur H. Harris, wife of the C.P.R. Special Traffic Representative, sails from Quebec on the Empress of Ireland May 29, to rejoin her daughter in Switzerland. She will spend the summer in Europe, returning to Montreal in Oct., after placing her daughter at school in Dresden.

John Logan, after 36 years' service in the G.T.R., has been pensioned, and on May 1 he was presented with an address and a couple of easy chairs, one being for Mrs. Logan, by the employes of the car department, St. Thomas, Ont., where he had been engaged during the entire period of his service.

Jos. Clarke, who died at Toronto General Hospital May 1, had been employed as locomotive engineer on the C.P.R. for 27 years, running between Cataract Jct. and Elora. Among his children are Howard, C.P.R. station agent Melrose, Alta.; Roland, train dispatcher, Eau Claire, Wis., and Percy, operator, Warren, Wis.

J. Lawton, a Wabash Rd. conductor, has been sent for trial at the county sessions in June, for running his train from Corinth to Tillsonburg, without an order from the train dispatcher, and without protecting the rear of his train Jan. 2. As a result there was a collision in which an engineer and brakeman lost their lives.

F. R. Latchford, K.C., Ottawa, who was Minister of Public Works, Ontario, from 1889 to 1905, and has latterly been active in the promotion of the Nipissing Central Ry., has been appointed a judge of the Ontario High Court of Justice, to fill the vacancy caused by the appointment of J. P. Mabee, as Chief Railway Commissioner.

A. Hardy and J. Clark, who recently retired from the positions of General Freight and Passenger Agent, and Master Mechanic, Quebec and Lake St. John Ry., on the assumption of the management by the Canadian Northern Ry., were each presented, May 16, with an illuminated address, a purse of gold and a souvenir, by their former colleagues.

I. A. Bowles, for a number of years in the C.P.R. service at Montreal, and for some time local freight agent for the Canadian Northern Ry. at Montreal, died there May 9. Wm. C. Bowles, General Freight Agent C.P.R., Winnipeg, and Jos. Bowles, of the traffic department of the Quebec, Montreal and Southern Ry. Montreal, were brothers.

H. G. Elliott, Assistant General Passenger and Ticket Agent G.T.R., has been given leave of absence on account of ill-health, and left Montreal, May 16, and sailed from Vancouver, B.C., May 22, on the s.s. Aorangi for Australia and New Zealand, intending to reach Vancouver again at the end of July, and to return to duty in Aug.

M. J. Dalton, who has been in the G.T.R. employ at St. Thomas, Ont., for over 30 years, and who has been retired under the company's pension scheme, was presented with an arm chair by the employés there, April 26. Prior to entering the G.T.R. service he was engaged as a master mariner in the Great Lakes trade, sailing out of Port Stanley, Ont.

Jas. Watt, ex-Secretary of the Globe Printing Co., Toronto, who died there May 12, was for a short time some years ago general agent of the G.T.R. at Brockville, Ont., and prior to 1871 was in the service of the old Great Western Ry., and the To-

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ronto, Grey and Bruce Ry. Prior to coming to Canada he was with the North British Ry. in Scotland.

J. E. Leith, General Claims Agent, St. Louis and San Francisco Rd., who died at St. Louis, Mo., April 28, was a native of Toronto. He went to the United States after completing his education at Toronto University, and entered railway service in 1879. Among other positions held during his career was that of General Freight and Passenger Agent Texas Midland Rd.

E. W. Smith, recently appointed Superintendent Dining and Parlor Car Service, G.T.R., Toronto, was born at North Bridge, Mass., April 21, 1869, and entered railway service April, 1886, with the South-Eastern Ry., running between Montreal and Vermont. On the purchase of that line by the C.P.R., he was transferred to the Auditing Dept., C.P.R., where he remained four years, subsequently taking service with the G.T.R. in the Passenger Department, until appointed Inspector Dining Car Dept., G.T.R., in 1902, which position he held to date of present appointment.

Hugh Strain Carmichael, whose appointment as C.P.R. General Passenger Agent for Great Britain and Europe at Liverpool, Eng., was announced in our May issue, was born at Glasgow, Scotland, Mar. 7, 1874, and entered the State Steamship Line's service, Mar., 1889, remaining there after the taking over of that line by the Allan Steamship Line, until Dec., 1895, since when he has been successively: Dec. 13, 1895, to May 20, 1903, C.P.R. Steamship Line, Glasgow; to June, 1903, C.P.R. Steamship Line, Liverpool; July 1, 1905, to Sept., 1907, Passenger Agent, C.P.R., Liverpool; Sept. 15, 1907, to April 1, 1908, acting General Passenger Agent, C.P.R., London, Eng.

Geo. S. MacKinnon, Assistant Master Mechanic, Canadian Northern Ry., Winnipeg, who died May 12, was born at Melbourne, Que., Sept. 16, 1854, and entered railway service 1872, his record being: 1872 to 1878, apprentice and foreman Connecticut and Passumpsic River Ry., now Boston and Maine Rd.; 1878 to 1885, engineer South-Eastern Ry., now part of C.P.R.; 1885 to 1889, locomotive foreman C.P.R., Farnham, Que.; 1889 to 1891, Assistant Master Mechanic C.P.R., Farnham; 1891 to 1894, Master Mechanic C.P.R. lines east of Farnham; 1894 to 1901, Master Mechanic Ontario and Quebec Division C.P.R., Toronto; 1901 to 1904, Master Mechanic Western Division C.P.R., Winnipeg, Man.; 1904 to 1907, locomotive foreman Canadian Northern Ry., Winnipeg; Jan., 1908, to time of his death, Assistant Master Mechanic, Canadian Northern Ry., Winnipeg.

The G.T.R. trainmen, after a session at Toronto lasting three weeks, have completed a new schedule of rates of pay, which the company will be asked to grant. The schedule, it is stated, does not include any considerable increases in wages, but rather a readjustment of old prices and conditions.

It is reported from Ottawa that it has been decided to shortly place large orders for rails for the Transcontinental Ry. with the Dominion Steel Co., Sydney, N.S. From Sault Ste. Marie, Ont., it is reported that the Algoma Steel Co.'s rail mill will shortly resume operations, a number of large orders being in sight.

The G.T.R. Montreal city ticket office has been removed to 140 St. James St., heretofore occupied by the New York Central lines, which have moved their District Passenger Agent and city ticket offices to the room heretofore occupied as G.T.R. city ticket office at 137 St. James St., the two offices being on immediately opposite sides of the street.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Canadian Westinghouse Co. has issued a catalogue of fan equipment, and bulletins descriptive of its generators, motors and meters.

The Railway Material Co.'s New York office has been removed to floor 30, new Singer Building, corner Broadway and Liberty St.

R. W. Hunt & Co., bureau of inspection, tests, etc., have removed their Montreal offices to the Canadian Express Building, McGill St.

The American Brake Shoe and Foundry Co. has removed its New York office from 170 Broadway to the Hudson Terminals, Cortlandt Building.

The Canadian Bridge Co., Ltd., Walkerville, Ont., has been granted supplementary letters patent increasing its capital from $400,000 to $1,000,000.

W. H. Rosevear, who went to Winnipeg a short time ago to represent N. J. Holden Co., Ltd., of Montreal, has resigned to go with the Brydges Engineering and Supply Co., Ltd.

The Acme uncoupling device, manufactured by the Acme Railway Equipment Co., Philadelphia, Pa., is being placed on 1,800 cars which are being built for the Intercolonial Ry.

The Consolidated Railway Electric Lighting and Equipment Co. has recently issued bulletins 3 and 5, descriptive of its type D generator and the double equipment for its Axle Light system and fans, for railway, passenger and postal mail cars.

The Hart-Otis Car Co., Ltd., Montreal, has issued pamphlet 10, giving instructions for operating Otis dump cars in general service, and pamphlet 11, giving instructions for operating Hart convertible cars in ballast and construction work. Copies will be mailed by the Hart-Otis Co. to anyone asking for them.

The Hayes Track Appliance Co., Geneva, N.Y., has issued its catalogue 51, which is a very complete illustrated publication regarding derails, and is of great interest to engineers, maintenance of way men, etc. Plans are given for operating derails by pipe line from main track switch stand, all of the methods being in use, the plans being taken from the drawings of various railways.

A C.P.R. official wrote the Submarine Signal Co. from Liverpool, Eng., April 4, as follows: "The captain of our Empress of Ireland last month had a very striking example of the usefulness of your bell off Halifax harbor. He had had 1,000 miles thick foggy weather; picked up the bell 12 miles away, and worked his way in without any difficulty, notwithstanding the fact that he was unable to hear the fog signal on Sambro Head."

Robert W. Hunt & Co. have established an analytical chemical laboratory in connection with their St. Louis office, 1445 Syndicate Trust Building. In addition to general analytical work, particular attention will be given to analyses of and advice on iron foundry mixtures. This work and the laboratory will be under the direction of J. B. Emerson, who for several years past had charge of the metallurgical part of the wheel foundry of the Mt. Vernon Car Co. Previous to that engagement, he was in the Illinois Steel Co.'s employ.

The Ideal Fence Co., Ltd., Winnipeg, which was organized last year to take over the western business of the McGregor-Banwell Fence Co., Ltd., of Walkerville, Ont., has contracted with the Dominion Government for the supply, delivery and erection of 70 miles of fencing for the buffalo park near Hardisty, Alta. This fencing is to be over 7 ft. high and of no. 9 hard steel galvanized wire throughout, and will be the heaviest fence ever built in Canada. The posts are to be 15 ft. long. All material will have to be shipped in and carted an average distance of 25 miles across the prairie. This contract is to be completed in the fall, and when completed, the herd of buffalo now enclosed in the Elk Park reserve north of Edmonton will be transferred to the new park and a large herd of buffalo recently purchased by the Dominion Government in Montana will be moved to the reserve also. This will make the largest herd of buffalo in the world.

Railway Commissioners' Rules.

The Board of Railway Commissioners promulgated the following, April 21: "Rule 1 is rescinded, and the following substituted therefor: 1. Regular sittings of the Board will be held at the Court Room, Ottawa, at 10 a.m. on the first Tuesday of every month, for the hearing of matters, applications, or complaints. (a) In addition to its regular sittings, the Board may appoint special sittings at Ottawa or elsewhere.

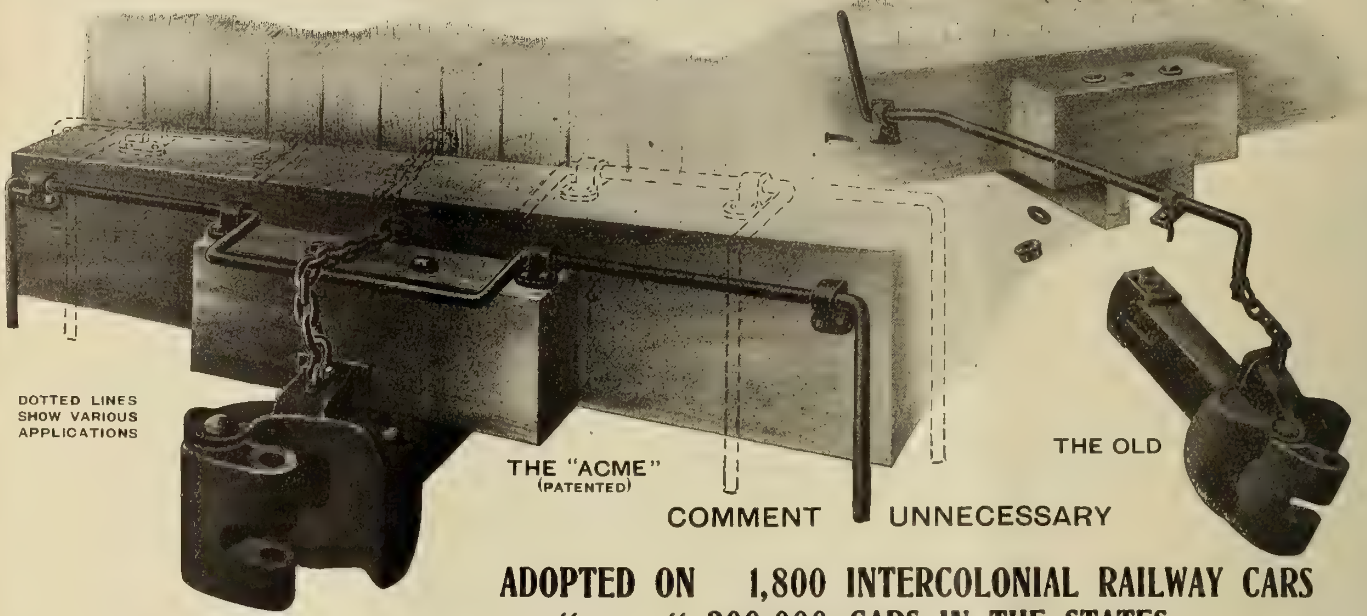
"7. (a) Any party to any matter, application, or complaint pending before the Board, may set the same down for hearing at the next monthly sitting of the Board, upon giving at least ten days', or such shorter notice as the Board may order, to all parties interested. (b) When contested matters, applications or complaints are ready for hearing, and are not at once set down by any party interested, the Secretary shall set the same down for the first sittings commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down. (c) When a matter, application, or complaint is set down for hearing by the Secretary, he shall give ten days' notice of hearing (or such shorter time as the Board may order) to all parties interested."

Inspection of Locomotive Tires.

The Secretary of the Board of Railway Commissioners issued the following circular, May 7, to railway companies: "In view of the very frequent breakage of rails on the various railway systems operating in Canada, and the numerous accidents resulting therefrom, the Board's inspectors have made a careful examination of the driving tires of the locomotives used on different railways; and they report that, on the tires of quite a large number of the engines there are skids, or flat spots, three to four inches in length and in some cases even longer. It has not been represented to the Board that these flat spots on the tires have been responsible for the rail breakage referred to; but instances are known where engines with skidded tires have left broken rails behind them, and the Board therefore recommends that railway companies subject to its jurisdiction, adopt some system for a more careful and rigid inspection of tires on locomotives, especially during the winter months, in order to prevent, as far as possible, the running of engines with defects of the kind mentioned. The Board desires your company to give this matter its careful consideration, and to receive such comment as it desires to make in connection therewith."

ACME RAILWAY EQUIPMENT CO.

PHILADELPHIA, PA.



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" " 300,000 CARS IN THE STATES

13,927 KILLED AND INJURED COUPLING AND UNCOUPLING FROM 1903 TO 1906 INC.

INTERSTATE COMMERCE COMMISSION

THREE CANADIAN NORTHERN POINTERS

THE NEXT HOLIDAY

A rare choice of playgrounds newly accessible by Canadian Northern lines:

Muskoka, the Maganetawan; the Superior Divide, the real North West; Lake St. John, the Saguenay, Upper St. Maurice, the Laurentians, from Montreal; the South Shore of Nova Scotia; West Coast of Cape Breton.

BUSINESS AND INDUSTRIES

The best of openings for the best of men are to be found on the 4,100 of Canadian Northern Railway lines.

A Few Suggestions:

New port at Key Harbor, and
New mines at Moose Mountain, Ontario;
New pulpwood areas and waterpowers,
New town at Latuque, and
New country beyond Lake St. John, Quebec;
New mines at Mattawin and Atikokan, with furnaces at Port Arthur;
New railway along the South Shore of Nova Scotia;
The West—Without limit for the landseeker, and all who supply his needs.
Inquiries on these points to the Industries Dept., Head Office, C.N.R. Bldg., Toronto.

FISHERMAN AND HUNTER

There will be a Canadian Northern exhibit from six Provinces at the Sportsmen's Shows at Toronto (March 21-28) and at Montreal (April 4-11).

Four hundred miles in Nova Scotia. Six hundred in Quebec. Two hundred in Eastern Ontario. Three hundred between Lake Superior and Lake of the Woods. All three Prairie Provinces.

For Hunters and Fishermen who cannot attend the Shows there is plenty of information for the asking.

Prospective travellers' inquiries answered by any of the following:

WINNIPEG—G. H. Shaw, Scott Bldg., Main St.; TORONTO—Wm. Phillips Can Nor. Bldg.; MONTREAL—Guy Tombs, Can. Nor. Que. Offices, St. James St.; QUEBEC—Alex. Hardy, Quebec & Lake St. John Offices; HALIFAX—P. Mooney, 124 Hollis St.

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RAILROAD FIR BRIDGE TIMBERS

TIES AND CULVERT STOCK

Quick Shipment. Low Prices.

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FULLERTON LUMBER & SHINGLE CO., Vancouver, B.C.

Railway Rolling Stock Notes.

The St. Martin's Ry. has added to its rolling stock a first-class combination car, which was purchased second-hand, and remodelled at St. Martin's, N.B.

The G.T. Pacific Ry. has recently placed orders with the Canada Car Co., Montreal, for 28 passenger cars, 6 combination passenger and baggage cars, 6 mail and express cars, and 20 cabooses.

The Temiskaming and Northern Ontario Ry., in addition to the 5 locomotives mentioned in our May issue, has received another from the Canadian Locomotive Co., Kingston, completing the order of six.

The Montreal Locomotive Works during April delivered 19 locomotives to the G.T. Pacific Ry.; 1 locomotive to the Toronto, Hamilton and Buffalo Ry., and 2 contractors' locomotives to M.P. and J. T. Davis.

The Intercolonial Ry., between April 13 and May 13, received the following additions to rolling stock: 5 box cars, 80,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S., and 4 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.

The C.P.R. between April 16 and May 13 placed the following orders for rolling stock: 77 box cars, 30 flat cars, 13 stock cars, at its Angus, Montreal, shops; 2 vans, at its Farnham, Que., shops, and 7 Hart-Otis ballast cars with the Dominion Car and Foundry Co., Montreal.

The C.P.R. between April 16 and May 13 received the following additions to rolling stock: 1 Pacific type locomotive, 1 colonist car, 2 mail and express cars, 2 baggage cars, 6 auto-baggage cars, 1 air-brake instruction car, 85 box cars, 43 flat cars, 42 stock cars, from its Angus, Montreal, shops; and 201 Hart-Otis ballast cars from the Dominion Car and Foundry Co., Montreal.

The Dominion Car and Foundry Co., Montreal, during March and April, delivered the following rolling stock: 185 steel underframes for 30-ton box-cars to the Quebec, Montreal and Southern Ry.; 100 steel underframes for 30-ton flat cars, and 40 all-steel 50-ton ore cars, to the Canadian Northern Ry., and 175 Hart convertible ballast cars, 50 tons capacity, built under license from the Hart-Otis Car Co., to the C.P.R.

The Canadian Northern Ry., between April 15 and May 15, received the following additions to rolling stock: 105 box cars for the Quebec and Lake St. John Ry., and 2 first-class coaches from Rhodes, Curry & Co., Amherst, N.S.; 200 Hart convertible cars from the Canada Car Co., Montreal; 2 second-class coaches from the Crossen Car Mfg. Co., Cobourg, Ont., and 5 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.

The Intercolonial Ry. has recently received the following additions to rolling stock: 84 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.; 10 refrigerator cars, 60,000 lbs. capacity; 43 box cars, 80,000 lbs. capacity; 31 flat cars, 80,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; one consolidation locomotive from the Canadian Locomotive Co., Kingston, Ont., and 10 Pacific type locomotives from the Montreal Locomotive Works.

The Canadian Northern Ry. has ordered ten 30-ton refrigerator cars from the Crossen Car Mfg. Co., Cobourg, Ont.

Following are the chief particulars:

Length, inside	29 ft. 6 ins.
Length, over end sills	36ft. 9¾ in.
Width, inside	8 ft. 3¾ ins.
Width, over side sills	9 ft. 0¾ ins.
Height, inside	7 ft. 8¼ ins.
Body and truck bolsters	Simplex
Roller side bearings	Susemihl
Brake beams	Simplex
Steel couplers	Latrobe
Air brakes	Westinghouse

The two G.T.R. mail cars recently built by the company at its Point St. Charles shops, which have been placed on the Montreal-Toronto route, are 60 ft. long inside measurement, the internal fittings being in accord with the plans of the railway mail service. The cars are painted in G.T.R. standard colors, with the Canadian arms on either side. They have 6-wheeled trucks, with 38 ins. steel-tyred wheels, with cast iron centres, and are equipped with Westinghouse air brakes and air signal, automatic coupler buffing device, and straight steam heating apparatus.

The G.T.R. has had a number of high side steel hopper gondola cars built in the United States, one order being for 500 and the other for 1,000. Following are the general dimensions: Length over end sills, 31′ 6″; length of body inside, 30′ ¼″; width of body inside, 9′ 6″; width over side stakes, 10′ 1½″; height from rail to top of body, 10′; length of drop doors in clear, 2′ 4½″; width of drop doors in clear-top, 3′ 4½″; width of drop doors in clear-bottom, 3′ ⅞″; distance from centre to centre of trucks, 21′ 9″; size of journals, 5½ x 10″; light weight of car, 37,400 lbs.; cubic contents or volume, 1,918 cu. ft. Special equipment: Westinghouse air brakes, Climax couplers, twin spring draft gear, arch-bar trucks with pressed steel bath-tub type of truck bolsters, and pressed steel brake beams.

C.P.R. STANDARD SPECIFICATIONS.

Following are standard specifications of C.P.R. passenger and freight cars, which do not change for the different types of cars. In future in giving particulars of C.P.R. equipment orders these specifications will not be repeated, but if any particular cars differ from the standards the fact will be mentioned:

PASSENGER CARS.

Body and underframe	Wood
Axles	5 x 9 in., M.C.B.
Bolsters	Double
Brake beams	Simplex trussed with adjustable head, high speed.
Brakes	Westinghouse air, high speed
Brasses	5 x 9 in., M.C.B.
Couplers	Tower passenger
Heating system	Gold with frumveller heater
Journal boxes	McCord malleable with steel inserts
Lighted by	Pintsch gas
Roofs	Standard passenger covered with canvas
Wheels	36¼ in., steel tyred

FREIGHT CARS.

Body and truck bolsters, and brake beams	Simplex
Brakes	Westinghouse air
Centre bearings	1 of malleable and 1 of steel
Couplers	Tower with solid steel knuckles
Journal bearings	M.C.B.
Journal boxes	McCord
Side bearings	Susemihl
Springs	C.P.R. standard
Trucks	All steel diamond pattern Barber roller, Simplex
Wheels	33 in cast iron

C.P.R. ROLLING STOCK UNDER CONSTRUCTION.

The rolling stock ordered by the C.P.R., as stated in our last issue, is of standard dimensions, with the following exceptions or additions:

Business car for Superintendent at Saskatoon, Sask., building at Angus shops; length, outside knuckles, 42′ 2″, over frame, 35′; total wheel base, 28′ 10″, truck centres, 24′, width, 8′, 11″, over frame. The layout comprises an observation room at back of car with table, desk and sofa, a bedroom, toilet room, a pull-out sofa with berth above for attendant; a kitchen, lockers, etc., with cellar under car.

Mail and express car, 1, building at Angus shops; length, 60′, 0″ x 9′ 10½″ over frame. Platforms, none, steel I beams to carry draft rigging, etc.; springs, 38″ quadruple elliptic; trucks, 4 wheel 5 x 9″ journals: vestibules, none.

Baggage car, 1, building at Angus shops; length 60′ 0″ x 9′ 10½″ over frame. Capacity, 20 tons of freight; platforms, none, steel I beams to carry draft rigging, etc.; springs, 38″ quadruple elliptic; trucks, 4 wheel 5 x 9″ journals; vestibules, none.

Refrigerator cars, freight, 48, building at Angus shops; length, 41′ x 9′ 1⅝″ over frame. Capacity, 30 tons of freight; length inside in clear between ice boxes, 34′ 6″; width inside, 8′ 3⅝″; height from top of slats to ceiling, 7′ 6½″; height from top of slats to meat racks, 6′ 11″; body and underframe, wood; axles, 5 x 9″, M.C.B.; doors, refrigerator type with insulation. Regarding the passenger refrigerator which is to be built, will be exactly the same as the freight refrigerators as regards general dimensions, etc. The capacity for the passenger refrigerator is 20 tons; 34″ steel-tyred wheels are used and steam pipe and air signal pipe are placed under the car so that it can be run in passenger trains.

Box cars, 127, building at Angus shops; length, 36′ 8″ x 9′ 0⅝″ over frame. Capacity, 30 tons; length inside, 36′ 0″; width inside, 8′ 6″; height inside, 8′ 0″; body and underframe, wood; axles, 4¼ x 8″; doors, security; paint, C.P.R. standard mineral brown.

Hart-Otis ballast cars, 2, being built by Dominion Car and Foundry Co., Montreal; length, 37′ 3″ x 8′ 10″ wide over frame. Capacity, 50 tons; length inside as gondola, 35′ 3″; length inside as hopper, 21′ 6″; width inside, 8′ 8″; height inside, 4′ 2½″; length between sills, 36′ 10″; length over sills, 37′ 3″; width over sills, 8′ 10″; body and underframe are of steel construction with wooden floor and doors; axles, 5½ x 10″, M.C.B.

Stock cars, 13, building at Angus shops; length, 36′ 8″ x 9′ 5″ over frame. Capacity, 30 tons; length inside, 36′ 0″; width inside, 8′ 9¾″; height inside, 7′ 1¼″; body and underframe, wood; axles, 4¼ x 8″, M.C.B.; paint, C.P.R. standard mineral brown; roofs, double board.

Flat cars, 48, building at Angus shops; length, 36′ 8″ x 8′ 10″ over frame. Capacity, 30 tons; body and underframe, wood; axles, 4¼ x 8″, M.C.B.; paint, C.P.R. standard mineral brown.

Vans, 18, building at Farnham shops; body and underframe, wood; axles, 4¼ x 8″, M.C.B.; bolsters, none; brake shoes, unflanged steel back diamond "S"; brasses, 4¼ x 8″, M.C.B.; couplers, Tower; heated by stove; roof, canvas; trucks, none, pedestals are attached to underframe of car; wheels, 33″ cast iron. All sills are carried out to buffer beam and form the timbers for supporting the platform, steps at each corner of car being provided after the style of box car steps.

Canadian Railway Club.

At the annual meeting in Montreal, May 5, the reports showed the Club to be in a flourishing condition. During the year 136 new members were admitted, making the total membership 682. The following officers were elected: President, L. R. Johnson; First Vice-President, H. H. Vaughan; Second Vice-President, A. A. Maver; Executive Committee, J. H. Callahan, J. Coleman, A. A. Goodchild, T. McHattie, A. W. Wheatley and W. N. Dietrich; Secretary, James Powell; Treasurer, S. S. Underwood.

During the evening the past presidents were presented with valuable tokens in appreciation of their services, the following being recipients: E. A. Williams, President 1902-1903; T. McHattie, 1904; S. King, 1905-1906; W. E. Fowler, 1906-1907; W. D. Robb, 1907-1908; After the business was concluded, refreshments were provided and a very enjoyable concert was held.

* * *

The employes of the Port Hood-Richmond Ry. Coal Co., Port Hood, N.S., have applied to the Dominion Department of Labor, for the appointment of a board of arbitration in connection with the application for an increase of wages.

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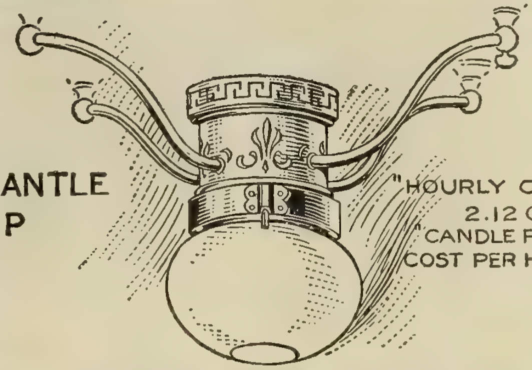
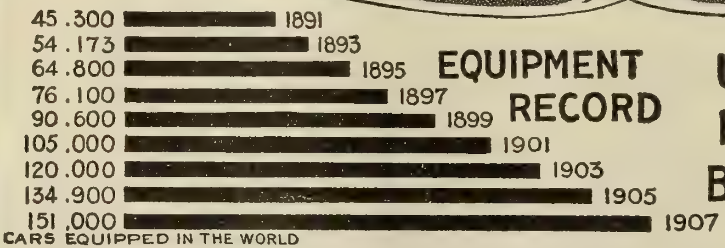
LATEST MANTLE LAMP



"HOURLY CONSUMPTION 2.12 CUBIC FEET"
"CANDLE POWER 99.5"
COST PER HOUR, ONE CENT.



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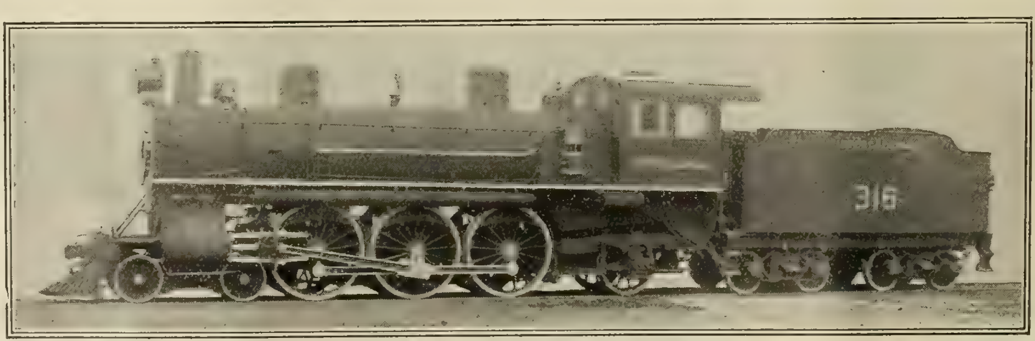

CANADIAN LOCOMOTIVE Co. Ltd.,
KINGSTON, ONT.,

Builders of Simple and Compound LOCOMOTIVES Adapted to every variety of service.

National Transcontinental Railway.

The tabular statement appearing in the official report of the speech of the Minister of Railways, referred to in our last issue, shows the total length of the Eastern Division from Moncton, N.B., to the west bank of the Red River, at Winnipeg, to be 1,804.66 miles. The sections not under contract are given as: Mileage 656.07 to 877.75, near Weymontachene, to near Harricanaw River, 221.68 miles; mileage 1,127.75 to 1,171.85, one hundred miles west of junction with Temiskaming and Northern Ontario Ry., to west end of district D, 44.10 miles; mileage 1,409.35 to 1,429.76, from 19½ miles west of Mud River to west end of district E, 20.41 miles; mileage 1,429.76 to 1,557.80, from westward district E to Lake Superior Junction, 128.04 miles. The estimated cost of these sections is $19,030,173.

A report from Montreal May 4 says as a result of an interview between the Premier of Canada, the Premier of Quebec and C. M. Hays, President G.T.P.R., on the previous day, it is expected that the portion of the Transcontinental Railway to run through the Province of Quebec would take a more southerly route than that on which construction is now in progress. Officials of the G.T.P. Ry. at Montreal refused to discuss the matter, but reports from Quebec and Ottawa state there is nothing in the report, the dispatch from Ottawa stating that no change of plans or location of the line is under consideration.

A press report May 8 said: "It is estimated that the building of the N.T.R. through New Brunswick will involve a total expenditure of close on $15,000,000 between now and 1911 in that Province." On April 13 the Minister of Railways presented a tabular statement in the House of Commons showing the mileage under contract, with the estimated cost of each section. This shows the total mileage from Moncton to the New Brunswick-Quebec boundary to be 256.68 miles, and the estimate upon which the contracts were let amounts to less than $7,000,000, distributed as follows:

	Miles.	Estimate.
Moncton to Chipman.......	50.00	$ 989,895.90
Chipman easterly...........	8.55	289,190.62
Chipman westerly..........	39.05	967,434.95
Intercolonial crossing west...	66.40	1,898,124.21
Mileage 164 to Grand Falls..	31.80	1,646,253.65
Grand Falls to boundary....	60.88	1,385,941.09
	256.68	$6,976,840.42

A sub-contract is reported to have been let to Powers and Brewer, Woodstock, N.B., for the bridgework on the section from mileage 164 to Grand Falls, 31.80 miles, the general contractor for which is the Willard Kitchen Co., Grand Falls, N.B. Sub-contracts for grading have been let as follows: Jas. Kelly, four miles; Cook Kitchen, four miles; Wesley Kitchen, four miles; —. Phillips, P.E.I., one mile; P. Pagano, Montreal, three miles.

Sub-contracts are reported let to W. C. Chambers, Harriston, Ont., and to —. McQuigge, Kenora, Ont., for sections on the line north of Lake Nepigon.

The Dominion Government has decided to meet the request of the New Brunswick Government that the Commissioners of the Transcontinental Railway take over the expense of protecting from fire the forests of the Province along the route of the railway.

Owing to the high water in the St. Maurice River, about two miles of the line under construction near La Tuque, Que., is submerged, and it is feared that several miles of the line will be washed out.

The location of the Transcontinental Ry., says the engineer of the Ontario Department of Public Works in his annual report for 1907, has been completed across the Province, a distance of 758.47 miles, under the direction of the Commissioners of the Transcontinental Ry. From the Manitoba boundary eastward 157.80 miles are under construction. The total approximate number of miles graded from the Manitoba-Ontario boundary to English River, in detached sections, is 84 miles. From the Quebec boundary westward 71.75 were under construction.

GRAND TRUNK PACIFIC RY.

The tabular statement appearing in the official report of the speech of the Minister of Railways, referred to in our last issue, gives the location of the several contracts on the main line of the G.T. Pacific Ry., between Winnipeg, Man., and Prince Rupert, B.C., with the names of the contractors and the dates when the contracts were entered into, and when the work should be finished. The work to be done under these contracts included grading the roadbed and building small culverts and bridges.

Date of Contract	Name of Contractor	Location of Work	Date set for Completion
June 22, 1907....	Treat & Johnson, Winnipeg, Man .	Winnipeg to Portage la Prairie, 54 miles	Nov. 1, 1907.
Aug. 28, 1905....	McDonald & McMillan, Winnipeg..	Portage la Prairie to Touchwood Hills, 275 miles.	Completed.
Feb. 20, 1906.....	Canadian White Co., Montreal....	W. line Sec. 6, Tp. 27, R. 13, W. 2nd Mer., to W. line Sec. 24, Tp. 36, R. C. W. 3rd Mer., 140 miles.	Completed
Feb. 20, 1906	Foley Bros., Larsen & Co., Battleford.........................	W. line Sec. 24, Tp. 36, R. 6 W. 3rd Mer., to a point near Edmonton, Alta., 316 miles.	Nov. 1, 1906.
Jan. 4, 1908......	Foley, Welch & Stewart, Kenora..	East line of Sec. 13, Tp. 53, R. 24 W. 4th Mer., to east bank of Wolf Creek, 129 miles.	Nov. 30, 1908.
Mar. 19, 1908.....	Foley, Welch & Stewart, Kenora..	Prince Rupert to Copper River, 100 miles.	Aug. 31, 1909.

The Department, said Hon. G. P. Graham, has been advised that contracts have been awarded for the following works, but no details were given: Concrete piers, pedestals and abutments of steel bridges; steel superstructures of large bridges; station buildings, engine houses and machine shops; water services; steel rails and fastenings, frogs, diamond crossings, etc.; ties, fence posts, telegraph posts.

In making a statement as to the position of construction April 30, Collingwood Schreiber, Consulting Engineer to the Department of Railways, said with the exception of about 500 miles of the mountain section, the whole of the line being constructed by the G.T. Pacific Ry. was under contract. The whole of the prairie section, from Winnipeg to the foot of the Rocky Mountains, about 100 miles west of Edmonton, was expected to be open for traffic in the fall. Rails were laid from within 30 miles of Winnipeg to Battle River, and from Battle River west to Edmonton much of the grading was completed. The delay in the work of completing the tracklaying into Edmonton was due to the loss of time in the construction of the bridge over the Battle River.

Tenders for the supply of 600,000 ties for delivery at points west of Edmonton are reported let, and arrangements are being made to secure a sufficient supply of ties to carry the line as far as the Yellowhead Pass.

The British Columbia Government has granted registration to the G.T. Pacific Ry. townsite as Prince Rupert, despite the fact that the name had been appropriated by a land speculator. Sub-contracts are reported to have been let by Foley, Welch and Stewart for grading on the line easterly from Prince Rupert to Ross and Caulson, Kenora, Ont.; J. E. Bostrom, H. and A. McClure, and the Burd Contracting Co. of Bellingham, Wash., and F. Antonelli.

G.T. Pacific Branch Lines.—At a session of the Board of Railway Commissioners in Ottawa, May 5, D. McNicoll, Vice-President C.P.R., objected to the G.T. Pacific Ry. plans for lines in Fort William, Ont., on the ground that they would seriously interfere with the construction by the C.P.R. of enlarged terminals. The C.P.R. favored the construction of joint terminals for the two companies, it being understood that the Canadian Northern Ry. could join in. The C.P.R. would consider the giving of running rights over the C.P.R. through Fort William to a diamond crossing with the Canadian Northern Ry. at Port Arthur, on the wheelage basis. The Chief Commissioner told the companies to reach an agreement on this basis, otherwise the Board would make an order.

When the G.T. Pacific Ry. bill for an extension of time for the construction of the branch lines, which it is authorized to construct as the G.T. Pacific Branch Lines Co., came before the House of Commons in committee of the whole, May 8, T. H. Lennox moved the insertion of an amendment with respect to taking over of the lines by the Government. The amendment provides that if the price of the branches cannot be agreed upon it shall be determined by the Board of Railway Commissioners, either side having permission to appeal to the Supreme Court, but the Government before it can exercise its option to purchase must have a resolution of Parliament authorizing it to do so. The debate was adjourned.

The Engineer of the Ontario Department of Public Works, in his report for 1907, says the G.T. Pacific Ry. has located a branch line from North Bay to a junction with the main line of the Eastern Division of the G.T.P. Ry. (National Transcontinental Ry.), a distance of 225 miles. The construction of a line known as the Lake Superior Branch, from Fort William, Ont., to a junction with the main line of the Eastern Division, at a point known as Superior Junction, a distance of 202.8 miles, which has been finally located, has been in progress for the last two years. About 70% of the grading and bridging is completed, and 115 miles of track laid from Fort William westerly. It is expected that the entire branch will be completed during the current season. The company has located an extension of this branch through Fort William to Port Arthur and thence easterly to Bare Point.

An item has been going the rounds of the daily press to the effect that a shipment of about 2,500 tons of steel rails had been delivered at Vancouver, B.C., by the Holt Blue Funnel Line, for the G.T. Pacific Ry.; that this shipment, the place of origin of which was given as Pittsburg, Pa., was sent to British Columbia, via New York, thence by the Atlantic route, through the Suez canal, to Kobe, Japan, and from there across the Pacific. We are officially advised that the item is entirely incorrect, and that no rails have been bought for the Pacific coast end of the line.

Grand Trunk Pacific Townsites.—G. N. Riley, Land Commissioner G.T.P. Ry., in an interview at Winnipeg, May 4, said the company had then 80 townsites on the market, including five divisional points. Only one townsite had been surveyed west of Edmonton, viz., adjoining the Canadian Northern Ry. at Stoney Plains. In laying out these future towns and cities a great deal of care has been taken to have them regular. With three exceptions, all the

BALDWIN LOCOMOTIVE WORKS

The following locomotives are in stock and available for immediate delivery:—

FOR PASSENGER SERVICE:
One American type with cylinders 18″ x 24″, standard gauge.

FOR LOGGING SERVICE:
Two six-coupled double ender locomotives with cylinders 15″ x 20″, standard gauge.

FOR SWITCHING SERVICE:
One four-coupled locomotive with cylinders 18″ x 24″, standard gauge.
One six-coupled locomotive with cylinders 18″ x 24″, standard gauge.
Two six-coupled locomotives with cylinders 21″ x 26″, standard gauge.

FOR FREIGHT SERVICE:
One ten-wheeled type with cylinders 18″ x 26″, standard gauge.
One ten-wheeled type with cylinders 18″ x 24″, standard gauge.
One consolidation type with cylinders 28″ x 32″, standard gauge.
Three consolidation type with cylinders 20″ x 24″, standard gauge.
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townsites are on the north side of the railway. Main streets run at right angles to the railway and directly north from the depot. The next parallel street to the east is King St., and then Dominion St. To the west is Queen St., and then the name of the Province in which the town lies. Parallel with the railway line are avenues numbered. All the lots are rectangular blocks, and consequently there will be no flat-iron buildings in future. Parallel with the railway and adjoining the depot right-of-way, a long strip of land 100 ft. wide has been reserved by the G.T.P. at each town for the purpose of planting trees and shrubs and beautifying the town. The company will impose building restrictions in all towns. Along Main St. and on the avenues close to the depot on a given area, no buildings will be allowed to cost less than $1,000. No blocks with shops, livery stables, or other noisy and disagreeable business will be allowed near the depot. They will be segregated in one block at a convenient place in the town. (May, pg. 347.)

The Commissioners are receiving tenders for the construction of steel superstructures and floor system (with ties and rail guards complete) for bridges at the following points: Mileage 21.7, Canaan River; mileage 57, Salmon River; mileage 184, Little Salmon River viaduct; mileage 197, Four Mile Brook; mileage 207.8, Grand River; mileage, 209.8, Sigas River; mileage 213.8, Quisbis River; mileage 220.9, Green River; mileage 227.8, Iroquois River; mileage 230.2, Madawaska River; mileage 243.8, Baker Brook.

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Michigan Central Railroad Report.

The directors' report for the year ended Dec. 31, 1907, covers the operation of the following mileage: Main line, 270.07 miles; proprietary lines, 345.05 miles; leased lines, 1,117.34 miles; lines operated under trackage rights, 14 miles; total, 1,746.46 miles. Of these lines 380.04 miles are in Canada, comprising the Canada Southern Ry., 226.18 miles, and branch lines 153.86 miles. The total cost of road and equipment to Dec. 31, 1907, was $35,213,257.09, representing for the 270.07 miles owned, $130,386 per mile; the Joliet and Northern Indiana Rd. construction account was increased $791,000. The gross earnings were $28,547,109.94, an increase of $2,271,521.81 over the previous year. The freight earnings were $19,926,803.28, an increase of $1,276,573.72, due to a generally increased movement of all commodities. The passenger earnings were $6,541,102.67, an increase of $612,228.65, due to a general increase of local and interline business. The express earnings were $1,241,632.68, an increase of $340,217.68. The expenses of operation were $23,131,750.65, an increase of $1,401,486.66, largely due to the higher cost of material and increases in wages. Maintenance of way and structures showed an increase of $1,502,734.11; maintenance of equipment a decrease of $1,472,301.22; and conducting transportation, an increase of $1,362,266.28. The net earnings were $5,415,359.29, an increase of $870,035.15 over those of the previous year. Other income was $702,518.99, against $402,003.85 in 1906, the increase of $300,515.14 being due to increased revenue from securities and interest on advances. The first charges totalled $4,388,512.80, an increase of $429,012.33, caused chiefly by interest on additional bonds issued and interest on loans. Of the balance available for dividend, $1,729,365.48, cash dividends of 8%, against 5% for the previous year, were paid, absorbing $1,499,040.00, leaving a surplus of $230,325.48; of which $112,160.03 was debited to profit and loss in adjustment of sundry accounts; the balance of $118,165.45, together with $9,012,961.89 credit balance at Dec. 31, 1906, making a balance for Dec. 31, 1907, of $9,131,127.34.

A Railway to Hudson Bay.

According to a recent Ottawa despatch the Government has practically decided to submit a bill at the current session of the Dominion Parliament providing for the construction of a railway to Fort Churchill, on Hudson Bay. This question has been before Parliament in one shape or another since 1880, and during the present session has been discussed on more than one occasion.

Replying to a question in the House of Commons Mar. 30, the Minister of the Interior said several suggestions had been brought to the attention of the Government for the construction of a railway to Hudson Bay, but no definite proposition had been made. The act of Parliament authorizing a land grant for the construction of such a railway was still in force. This subsidy was granted by sec. 7 of the Dominion Lands Act, 1884, and is a standing grant of 12,800 acres of land per mile of a railway from Winnipeg to Hudson Bay.

A discussion was raised in the House of Commons, April 7, by W. E. Knowles, M.P. for West Assiniboia, upon the question, by moving a resolution to the motion to go into supply that the Government should take into consideration the transportation needs of the great west, especially in regard to the immediate construction of the Hudson Bay Ry. The completion of such a line to Fort Churchill would only mean the construction of about 475 miles of railway over a route that was particularly adapted to construction. Fort Churchill was reported to be one of the finest harbors in the world, was open for nine months of the year, and could with icebreakers be kept open the year round. At present Hudson Straits could be made safely navigable for four months in the year and perhaps longer. The Canadian Northern Ry. had already constructed a line to the Pas Mission, on the Saskatchewan River, and had practically the whole of the territory from that point to Fort Churchill under survey. The Minister of the Interior stated that the matter was under the consideration of the Government, and it was expected that a definite statement of policy would be made before the close of the session.

From the information in the possession of the Government it is estimated that the line will cost about $30,000,000. The construction will not be heavy, as the prairie country stretches to within 120 miles of Fort Churchill. From this point until the Bay is reached, the proposed route will follow the Churchill River pretty closely, and considerable earth cuttings will be necessary. W. Mackenzie, President Canadian Northern Ry., is reported to have submitted an offer to the Government, and it is said that during his present visit to England he will consult as to the financing of the construction of the line. The project involves the subsidizing of a line of steamers from Fort Churchill to Liverpool, Eng.

The details of the measure are being worked out, but it is understood that it will be along the lines suggested in the House last session by the Premier, and further explained by Hon. C. Sifton in March. The suggestion of the ex-Minister of the Interior is to fund the proceeds from the sale of an area of about 3,000,000 acres of Dominion lands on even-numbered sections in the West hitherto set apart as railway reservation lands for the C.P.R. and Canadian Northern Ry. These even-numbered sections or railway grant lands in the west, aggregating some 30,000,000 acres, will shortly be released for homesteading. It is estimated that in a few years the proceeds from, say, 3,000,000 acres of these lands reserved by the Crown for sale would realize $30,000,000, a sum sufficient to pay the cost of the construction of the road to Hudson Bay by the Government, the building of elevators at Fort Churchill, improvements to the harbor, and any necessary buoying and lighting of the channel for steamers in the bay and straits.

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Recent Provincial Legislation.

At the recent session of provincial legislatures the following acts affecting transportation interests were passed:

NOVA SCOTIA.

Acadia Coal Co.—Amending the company's act of incorporation.

Annapolis Valley Ry.—Amending the original act of incorporation.

Arisaig and Country Harbor Iron and Ry. Co.—Amending the act of 1906 incorporating the company.

Bedford Electric Co.—Consolidating and amending the acts passed with respect to the company.

Cape Breton Coal, Iron and Ry. Co.—Amending the acts passed respecting the company.

Dartmouth Ferry.—Amending the act of 1890 with respect to the ferry.

Dartmouth Tram and Power Co.—Reviving and amending the act of 1890, incorporating the company.

Halifax and Southwestern Ry.—Respecting right-of-way of the railway and certain damages therefor.

Intercolonial Coal Mining Co.—Amending the company's act of incorporation.

Inverness.—Amending the act with respect to the provision of aid for the construction of a railway in the county of Inverness.

Liverpool.—To enable the town of Liverpool to borrow money to pay railway land damages.

Mabou Coal Co.—To incorporate the Mabou Coal Co.

North Mountain Ry.—Amending chap. 130 of the acts of 1902 incorporating this company. A second act respecting the N.M.R. Co. was also passed.

Yarmouth Street Ry.—To amend the act consolidating the acts relating to the company.

QUEBEC.

Ha! Ha! Bay Ry.—Act of incorporation.

L'Avenir and Melbourne Ry.—Act of incorporation.

Magdalen River Valley Ry.—Authorizing change in location of terminals, etc.

Quebec Electric Co.—Amending the act incorporating La Compagnie de Pouvoir Electrique, Quebec.

Railway subsidies.—Respecting subsidies to certain railways.

Sherbrooke.—Amending the charter of the city.

Montreal Street Ry.—Amending the acts relating to the company.

◆

The question of freight rate rebates and shipments from flag stations is being considered by a number of Ontario boards of trade. The matter, it is stated, has been brought before the notice of the Board of Railway Commissioners, with the result that a representation has been made that the boards of trade should offer suggestions as to new regulations, shipping bills, etc.

During March, 26 employes were killed and 23 were injured in railway and railway construction service. Of the fatalities, 14 were due to dynamite explosions, 4 to being run over, 3 to being caught between cars, 3 to being struck by trains, and 2 to falling materials. Of the non-fatal accidents, 5 were caused by derailments, 4 each by dynamite explosions and by collisions, 3 by falls, 2 each by being caught between cars, by being struck by cars, and by falling materials, and one by machinery.

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The question of the reclamation of Ashbridge's Bay has been under consideration by the Toronto City Council for several years, and a good many plans have been prepared and proposals made upon the subject. The latest plan has been submitted by J. Oborne, General Superintendent Ontario Division, C.P.R. The Corporation Commissioner of Industries recommends that the council acquire the whole waterfront along the north shore of the bay, and that the bay itself be used for commercial navigation.

A petition for a winding up order has been granted in the case of McRae, Chandler and McNeil, Ltd., contractors on the Temiskaming and Northern Ontario Ry.

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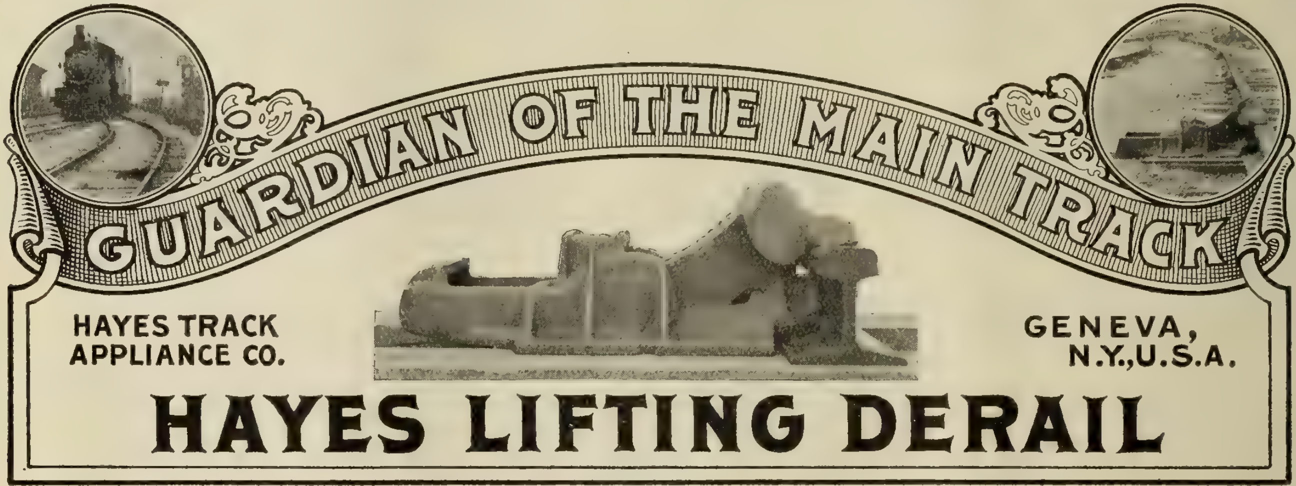
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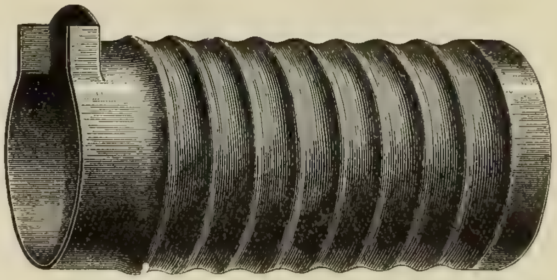

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TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Canadian Northern Express and Telegraph Cos.—D. B. Hanna, Third Vice-President, has issued a circular announcing that Scott Griffin, heretofore Superintendent at Winnipeg, has been appointed manager of these companies with headquarters at Toronto. All communications respecting tariffs, classifications, conference committee and Express Traffic Association bulletins and matters of a general nature pertaining to the Manager's office should be sent to him at Toronto.

Canadian Northern Quebec Ry.—R. M. Gauthier, heretofore storekeeper C.N.Q. Ry. at Shawinigan Junction, has been appointed storekeeper Quebec and Lake St. John Ry., succeeding A. Hardy, resigned. His new jurisdiction extends over both the C.N.Q.R. and the Q. & L. St. J.R. Office, Quebec.

T. C. Hudson, heretofore Master Mechanic C.N.Q.R., Shawinigan Falls, Que., has also been appointed Master Mechanic Quebec and Lake St. John Ry., succeeding J. Clark. All employes of the mechanical and car departments will report to Mr. Hudson. Office, Quebec.

Canadian Pacific Ry.—The office of W. B. Bulling, Assistant Freight Traffic Manager, has been transferred from Toronto to Montreal. For some months past Mr. Bulling has spent most of his time in Montreal.

H. P. Timmerman, General Superintendent Eastern Division, having returned to duty after leave of absence, C. Murphy, who was acting in his stead, is now acting General Superintendent of the Ontario Division during J. Oborne's absence in Europe.

W. G. Annable, General Baggage Agent, issued the following circular May 1: J. O. Apps, Montreal, is Assistant General Baggage Agent, and in charge of Baggage Department, Atlantic, Eastern, Ontario and Lake Superior Divisions and Upper Lake Steamship Service. He will report to the General Baggage Agent, Montreal. J. Sparks, Winnipeg, is Assistant General Baggage Agent, in charge of Baggage Department, Central and Western Divisions. He will report to the General Baggage Agent, Montreal. E. V. Dangerfield, Calgary, is District Baggage Agent, in charge of Baggage Department, Western Division, reporting to Assistant General Baggage Agent, Winnipeg. F. E. Quinn, Vancouver, is Assistant General Baggage Agent in charge of Baggage Department, Pacific Division, the British Columbia Coast, Lake and River Service, and the Pacific Service. He will report to General Baggage Agent, Montreal.

J. H. Boyle, heretofore Trainmaster district 3, Eastern Division, Montreal, has been appointed Assistant Superintendent district 3, with office at Quebec, succeeding E. Reynolds, who has resumed service as a passenger conductor.

R. W. Bishop, Assistant Engineer, Smith's Falls, Ont., has resigned to go into general contracting. It is not the intention to fill the position for the present at least.

R. C. Montgomery has been appointed roadmaster at Smith's Falls, Ont., vice J. Drinkwater.

F. L. Crawford, relieving agent, is acting as agent at Galt, Ont., pending the appointment of a successor to W. C. Whittaker, transferred to London, Ont.

Wm. C. Whittaker, heretofore agent at Galt, Ont., has been appointed agent at London, Ont., succeeding Jas. Houston, who has been granted two months' leave of absence. On Mr. Houston's returning to duty he will be assigned another place in the company's service.

W. P. F. Cummings, General Steamship Agent C.P.R. Passenger Department, Winnipeg, is reported to have resigned owing to ill-health, and to have been succeeded by H. M. Tait, heretofore his assistant.

Pending the opening of the section of the line into Saskatoon, Sask., June 15, C. S. Maharg, who has been appointed Superintendent of the new district of the Central Division, with office there, is in charge of the operation of construction traffic. The boundaries of the new district are not definitely fixed, and until then the full staff of officials will not be appointed. The Superintendent's present staff comprises: Trainmaster, W. M. Ansley; Bridge and Building Master, A. H. Bears, heretofore Bridge and Building Master, Winnipeg, Man.; Roadmaster, J. Canty, heretofore Roadmaster, Brandon.

R. A. Bainbridge, heretofore acting as assistant to C. E. Cartwright, Divisional Engineer, C.P.R., Vancouver, B.C., is reported to have been appointed Divisional Engineer of Construction and Maintenance, Esquimalt and Nanaimo Ry., with office at Victoria, B.C.

When F. W. Flanagan, General Passenger Agent for Great Britain and Europe, was compelled last Sept. to resign, owing to failing eyesight, after 25 years' conscientious attention to the duties of the department, H. S. Carmichael was appointed acting General Passenger Agent with office at 62 Charing Cross, London, Eng. Mr. Carmichael has now been appointed General Passenger Agent, with office at 24 James St., Liverpool, Eng., as stated in our last issue.

J. Murray Gibbon has been appointed Advertising Agent. Office, 62 Charing Cross, London, Eng.

Grand Trunk Pacific Ry.—W. A. Galliher, M.P. for Kootenay, B.C., is reported to have been offered the position of Western Solicitor and Legislative Agent G.T.P.R.

Jno. Leitch, son of Jas. Leitch, Chairman Ontario Ry. and Municipal Board, and heretofore engaged on C.P.R. second-track work between Fort William and Winnipeg, is reported to have been appointed an assistant divisional engineer on the G.T.P.R. Rocky Mountain section.

Grand Trunk Ry.—E. W. Smith, heretofore Assistant Superintendent Dining and Parlor Car Service, Montreal, has been appointed Superintendent Dining and Parlor Car Service, succeeding J. Watson, retired under the provisions of the company's pension fund. Office, Toronto.

The following agents have been appointed: Massena Springs, N.Y., W. C. English; St. Paul, Que., J. A. Bernier; Kinmount, Ont., A. Donnelly; Novar, Ont., F. A. Tebo; Phelpston, Ont., J. H. Donnelly; Kingsbury, Ind., P. D. White; Aubrey, Que., A. Allen; Algonquin Park, Ont., M. W. Boyle; Outside Agencies, Orillia, Ont., G. H. Clark.

Lackawanna-Grand Trunk Line.—I. W. Gautt, Division Freight Agent G.T.R., Toledo, Ohio, has also been appointed Manager L.-G.T. Line, vice W. Craigie, acting Manager. Mr. Gautt's office as Division Freight Agent, G.T.R., remains at Toledo and the L.-G.T. Line office remains at Chicago.

National Transcontinental Ry.—G. C. Dunn, District Engineer, with headquarters at N.B., is reported to have resigned, and C. O. Foss is said to have succeeded him.

L. P. Farris, until recently Commissioner of Agriculture in the New Brunswick Government, has been appointed by the Dominion Government and Commissioners of the Transcontinental Railway, Commissioner of Police along the line in the Province of New Brunswick.

Niagara, St. Catharines and Toronto Ry.—D. D. Mann having resigned from the directorate, D. B. Hanna has been elected to succeed him and has also been elected a Vice-President.

Quebec and Lake St. John Ry.—See Canadian Northern Quebec Ry.

Quebec Central Ry.—W. S. Fry has been appointed Treasurer, succeeding F. C. Young, who has been acting Treasurer since the suspension of E. H. Anderson, who was subsequently convicted of embezzlement.

Questions before the Railway Board.

The Secretary of the Board of Railway Commissioners issued a notice April 8 that the Board would sit in Ottawa April 24, to hear the application of the railway trainmen of Ontario to consider and settle the proposed uniform code of train rules, also that the Board would consider the following proposals submitted by the joint committee of the legislative board of the Brotherhood of Railway Trainmen, viz.:

That co-employes be allowed to attend investigations held by the Board's Inspector of Accidents, on request of witness. That witness fees to be paid at such investigations be increased.

That the Board order an increase in the number of men on trains for flagging purposes.

That telegraph operators be not employed under the age of 21, and evidence be furnished of their having one year's experience in railway work.

That the Board's inspectors be required to ride on and inspect the conditions of locomotives.

That all locomotives be equipped with dump ash pans, such as will avoid the necessity of a man going under the locomotive to clean it.

Also that the Board would consider the following matters presented to it by memorial through the Ontario Brotherhood of Railway Trainmen:

That all brakes, dogs and ratchets be placed on the top of the car instead of on the step at the end of the car.

That all cars used as cabooses be equipped with air brakes, gauge, conductors' valve, platform steps and cupola.

That operating levers be placed on both sides of the draw-bar along the end of the car.

That no obstructions be piled on the tops of any box cars while being hauled by the train crew.

That any order requiring men to ride on the top of trains be abolished.

That safety hand holds and steps be placed on locomotives.

That obstructions and structures be placed not less than 6 ft. clear of rail.

That not less than five men be placed on any train, and not less than three men on light engines.

That there be a car limit as to number.

That passenger brakemen have one year's experience in yard or freight service.

That steps be taken to prevent the handling of crippled cars on trains, except on wreck trains.

The application and proposals were heard by the Board as notified and are still under consideration.

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Speaking at a gathering of the Canada Club in London, Eng., May 7, C. A. Hanson associated with Hanson Bros., financial agents, Montreal, said, in spite of the financial crisis of 1907, at least $125,000,000 had been invested by British capitalists in Canada, and that a large proportion of this amount was put into railway securities. The total amount of Canadian issues placed in London, Eng., during the past six months, is reported by cable to have been $109,475,000, of which $64,000,000 was for railway purposes.

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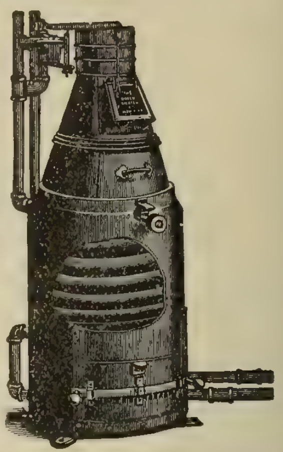

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WORKS & OFFICE - - - ST. THOMAS, ONTARIO

Canadian Northern Ry. Construction.

Quebec and Lake St. John Ry.—At the recent session of the Quebec Legislature, subsidies were voted in aid of the following lines: For a branch from the main line at Charlesbourg to L'Etang, on the Montmorency River, six miles, a subsidy at the rate of 6,000 acres of land, not convertible into money, to complete 3.8 of its line from Valcartier to Ste. Catherine, a subsidy at the rate of 3,000 acres of land per mile, not convertible into money, in lieu of the subsidy voted in 1906; for a branch line from Valcartier station in the direction of Gosford tp., 3,000 acres of land per mile, not convertible into money; and for an extension of 12 miles of the Valcartier branch to Gosford tp., including a branch of 3.50 miles to Riviere-aux-Pins, in the parish of St. Gabriel West, 3,000 acres of land per mile, in lieu of the subsidy voted in 1906. In connection with the second and third lines subsidized, it is provided that the lands are granted on condition that the company shall establish a free passage by the building and maintenance of the bridge over and the approaches on both sides of the Jacques Cartier River, for foot passengers, vehicles and animals, at or near the old railway bridge over the river, according to plans to be approved by the Government.

The La Tuque branch was formally taken over from the contractors May 1, and the train service is now being operated by the company.

Canadian Northern Quebec Ry.—The Quebec Legislature, at its last session, voted a subsidy of 3,000 acres of land, not convertible into money, in aid of the construction of a railway from St. Jacques to Rawdon, and thence northerly towards Lake Archambault, not exceeding 20 miles. Also to aid in the construction of 65 miles of its line from Montreal to Grenville a subsidy of 2,000 acres of land per mile, not convertible into money.

Canadian Northern Ontario Ry.—The company is reported to have decided upon proceeding with the erection of the shops on Eastern Ave., Toronto, and plans are in preparation.

Canadian Northern Ry.—Hon. R. Rogers, Minister of Public Works for Manitoba, on returning to Winnipeg, after a conference with W. Mackenzie, President Canadian Northern Ry., stated that he had obtained an agreement for the construction of three new lines in the Province during the summer, viz.: An extension of 10 miles of the Wakopa section, running from Greenway to Adelpha, 51.8 miles; a line 10 miles northerly from Virden, crossing the C.P.R. tracks; and a line of 25 miles from the Rossburn line, through Rapid City, into the Viola Dale country.

M. H. McLeod, General Manager, has been on a trip of inspection to Oak Point, Man., and local reports state that it is expected that construction will shortly be started upon an extension of the line there.

A contract is reported let to Jas. Cowan, for the construction of an additional 18 miles on the Rossburn branch, which is at present in operation from Rossburn Junction to Rossburn, 78.7 miles, and it is intended to extend it to a junction with the Gilbert Plains-Edmonton line, near Buchanan, Sask.

Speaking of the company's construction programme for the season, D. D. Mann, Vice-President, said, at Winnipeg, May 7, all the lines will be ballasted and improved, and all construction work that was started last fall will be completed. There will be about 80 miles of new heavy steel rails laid within about a month. A line will have to be constructed to the Alberta coal fields, in which the company is interested, and which are about 150 miles from the railway. The work will probably be commenced this summer, either from Edmonton or Strathcona. The coal lands are located just on the mountain slope of northern Alberta; the construction work will be heavy, as the line will run through the mountains, and there is a lot of rock in the country. Surveys have been in progress in connection with the development of the coal lands for the last 18 months. (May, pg. 327.)

D. D. Mann, in the course of an interview at Winnipeg, May 12, said the company's Brandon-Regina line was to be newly ballasted, and several of the buildings in use as stations would be replaced by new structures during the summer.

Railway Commissioners' Traffic Orders.

4533. March 25, in the matter of the application of J. M. Dudley, Secretary for Canada of the Railroad Department of the International Committee of Young Men's Christian Associations, under sec. 341 of the Railway Act, for an order authorizing the G.T.R. Co. to continue certain transportation privileges heretofore granted to secretaries of railroad branches of the said associations, over its line of railway. Upon reading what is alleged in the said application and the letters of C. M. Hays, Second Vice-President and General Manager of the G.T.R. Co., and W. R. MacInnes, Chairman of the Advisory Committee of the Canadian Freight Association. The Board orders that any railway company operating in Canada subject to its jurisdiction be, and it is hereby, authorized to issue to the secretaries of railroad branches of the Y.M.C.A. located on its railway, of which its employes are members, and for their household effects, free transportation or reduced rates over its railway, when the said secretaries are travelling in connection with their secretarial duties, or are being transferred by the said Association. Provided that this order shall not apply or extend to city organizations of the Y.M.C.A. which are in no way connected with the work of the railway companies.

4559. April 1.—In the matter of the application of the C.P.R. Co., under sec. 341 of the Railway Act, for leave to grant a special rate to a party of mining students of McGill University, upon the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the company be granted leave to carry the party at a special rate of $50 each for the trip from Montreal to Vancouver, and return, including side trips to Rossland and Greenwood, in B.C.; or at a rate of $40 each from Montreal to Rossland, Phœnix and Greenwood, B.C., and return. That the company be granted leave to carry such members as may desire to leave the returning party at Moyie, B.C., and to return to Greenwood, B.C., for the purpose of continuing their practical studies until the close of the summer vacations, at 1c. per mile from Greenwood to Moyie and back to Greenwood, and to return from Greenwood to Montreal at the rate set out above. That any other parties desiring to travel for the same purpose to British Columbia or any other mining district, be granted equally favorable terms until otherwise ordered by the Board.

4682. May 5.—In the matter of the complaint of the Board of Trade of Fredericton, N.B., complaining that the C.P.R. Co. and the G.T.R. Co. were unjustly discriminating against the City of Fredericton in the rates charged on traffic originating west of Montreal, and in favor of St. John, N.B., and applying for an order directing that the discrimination be removed. Upon hearing counsel for the applicant, the C.P.R. Co. and the G.T.R. Co., the evidence adduced, and what was alleged, it is ordered that the Intercolonial Ry. and the G.T.R. be absolved from the agreement with the C.P.R. Co., as the result of which the rates to Fredericton on traffic from points west of Montreal were raised from 2½c. to 8c. per 100 lbs. above the rates on traffic from the same points to St. John, N.B., and that the G.T.R. be directed to restore to Fredericton the St. John basis of rates on traffic originating west of Montreal as aforesaid.

KLONDIKE MINES RY. FREIGHT TARIFF.

4684. May 7.—In the matter of the application of the Klondike Mines Ry. Co., under sec. 326 of the Railway Act, for approval of a proposed standard freight tariff submitted to the Board by the company, Oct. 25, 1907, for distances up to and including 35 miles, in substitution of its standard freight tariff approved by the Board Nov. 19, 1906. Upon the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the maximum freight tariff of the applicant company, submitted for the approval of the Governor-in-Council April 21, 1902, in substitution of its standard freight tariff, approved by the Board Nov. 19, 1906, be approved for all distances to and including 35 miles, pending the submission by the applicant company of its report to the Department of Railways and Canals for the 12 months ended June 30, 1908.

FREIGHT ON PUBLIC SCHOOL BOOKS.

4680. May 7.—In the matter of the application of the Morang Educational Co., Ltd., of Toronto, under sec. 321 of the Railway Act, for an order fixing a proper freight classification through Canada on public school books; Upon hearing counsel for applicant, the C.P.R. Co. and the Canadian Northern Ry. Co., the evidence adduced, and what was alleged; it is ordered that Canadian Classification 13 be amended by the addition of a carload rating of third class on books in boxes or cases (item 3, page 12); and that the amendment become effective not later than May 30, 1908.

Quebec Railway Subsidies.

At the recent session of the Quebec Legislature an act was passed authorizing the Government to grant subsidies in aid of the construction of railways in the Province as follows:

Atlantic, Quebec and Western Ry.—For 50 miles from near Gaspe Basin towards Causapscal on the Intercolonial Ry.; 4,000 acres of land per mile not convertible into money, in lieu of the subsidy granted in 1906. A similar land grant in respect of 80 miles of line between Port Daniel and Gaspe, in lieu of the subsidy voted in 1906.

Canadian Northern Quebec Ry.—For a railway from St. Jacques to Rawdon, thence towards Lake Archambault, not exceeding 20 miles, a grant of 3,000 acres of land per mile.

For 65 miles of its line between Montreal and Grenville, 2,000 acres of land per mile.

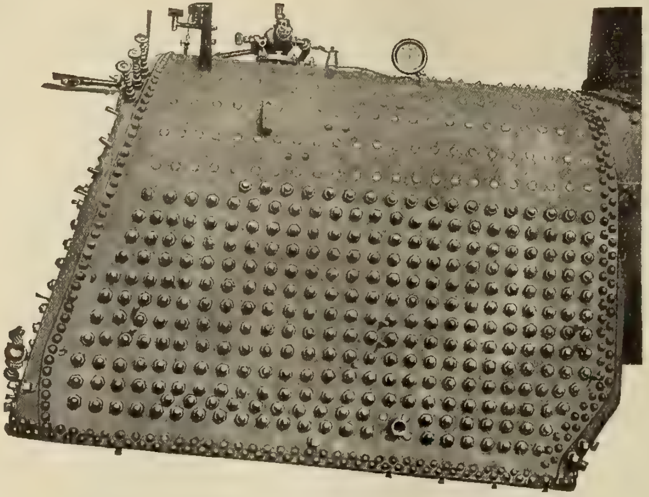
Indian River Ry.—For a line near the north end of Lake Megantic towards the south end of the lake at the International boundary, not exceeding 19 miles, a subsidy of 4,000 acres of land per mile. This subsidy is in lieu of that voted in 1904.

Interprovincial and James Bay Ry.—For a line from the present terminus of the C.P.R line (Temiscamingue Colonization Ry.) at Gordon Creek, to Ville Marie, about 50 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

Joliette and Lake Manuan Colonization Ry.—For a line from Joliette in the direction of Lake Manuan, for a distance of 60 miles, a subsidy of 4,000 acres of land in lieu of the subsidy voted in 1906.

Little Nation River Ry.—For a line from between Thurso and Montebello, to Cheneville, and thence to the C.P.R. near Nominingue, about 30 miles, a subsidy of 3,000 acres of land per mile.

Lotbiniere and Megantic Ry.—For a line from Lyster station running towards Lime Ridge, about 40 miles, a subsidy of 2,000 acres a mile, in lieu of the subsidy voted in 1906.



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MATANE AND GASPE RY.—For a line from Ste. Flavie to Matane, about 37 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906, for 30 miles from St. Octave de Metis to Matane.

METEBETCHOUAN COMPANY.—For a line from Lake Bouchette to St. Andre on the River Metebetchouan, 13 miles, a subsidy of 1,000 acres of land per mile.

ORFORD MOUNTAIN RY.—A subsidy of 2,000 acres of land per mile in respect of the following lines of railway: From Mansonville to the International boundary, 3.12 miles; from Bolton to Mansonville line, 7.54 miles; from Windsor Mills to Brompton Falls, 8 miles; from Melbourne road to the village of Melbourne, 3.50 miles; from a bridge on the main line to Lake Bonallie on the south side, five miles, in lieu of the subsidy voted in 1906.

PONTIAC AND INTERPROVINCIAL RY.—For a line from Waltham Station to Ferguson's Point, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

QUEBEC AND LAKE ST. JOHN RY.—For a branch from Charlesbourg to L'Etang on the Montmorency River, about six miles, a subsidy of 2,000 acres of land per mile, not convertible into money. For a line from Valcartier to Ste. Catherine, about 3.8 miles, a subsidy of 3,000 acres of land, in lieu of the subsidy granted in 1906. For a line from Valcartier Station in the direction of Gosford tp., a subsidy of 3,000 acres of land per mile. (This subsidy and the one for the line from Valcartier to Ste. Catherine are granted on the condition that the company shall establish a free passage over the Jacques Cartier River.) For a line from the terminus of the last mentioned line for 12 miles to Gosford tp., including a branch 3.50 miles in length to a point on Riviere-aux-Pins, in St. Gabriel West, in lieu of the subsidy granted in 1906.

QUEBEC CENTRAL RY.—For a line from St. George de Beauce towards Cabano on the Temiscouata Ry., about 30 miles, a subsidy of 3,000 acres of land per mile.

QUEBEC, MONTREAL AND SOUTHERN RY.—For a line from Yamaska in the direction of Levis, about 107 miles, a grant of 2,000 acres per mile. A similar subsidy for a branch from the main line at Becancourt to the St. Lawrence River, about four miles.

Subsidies have been voted for the construction of railways as follows, no special company being mentioned:

Jonquieres to Ha! Ha! Bay, about 20 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

Herbertville to St. Joseph d'Alma, about 10 miles, a subsidy of 4,000 acres of land per mile in lieu of the subsidy voted in 1906.

Roberval towards James Bay, for 30 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

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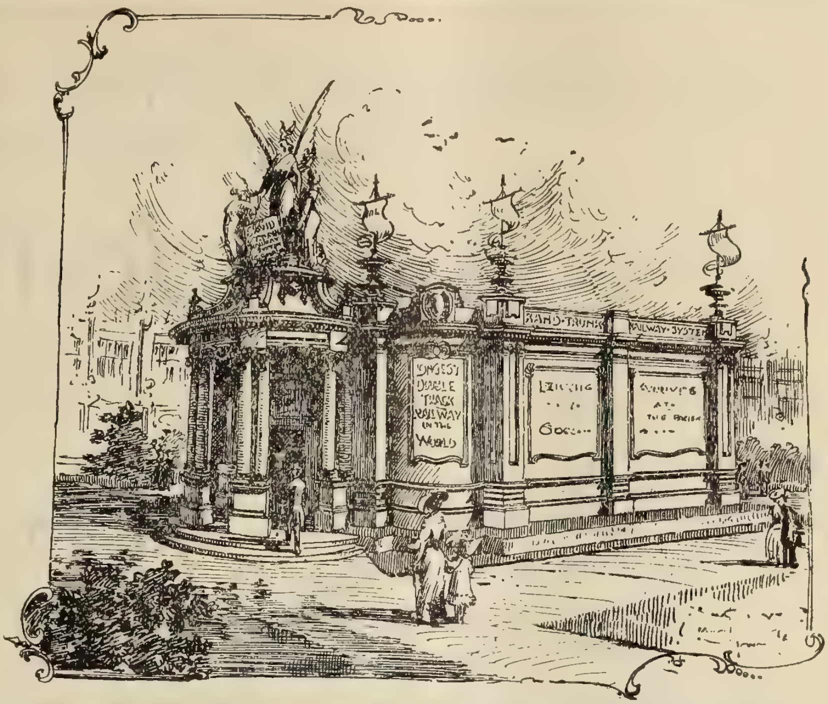
Uncoupling Devices for Freight Cars.—In Feb., 1907, the trainmen requested the Board of Railway Commissioners to order that operating levers for uncoupling freight cars should be placed at both sides of the ends of the cars. No action having been taken on the request, it was again brought before the Board on April 24, when it was decided that the Board's inspectors look into the matter and report. The railway companies oppose the request on the ground that it is unnecessary, owing to the fact that there is always an operating lever for either one car or the other on the side from which the trainman may be operating. The trainmen contend that those levers are frequently out of repair and that the pin in the knuckle, which is on the side convenient to operate, is frequently bound so that it cannot be lifted, and that by having the operating lever on both sides cars could be uncoupled without the necessity of going underneath trains to get across to the other side.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ONGEST DOUBLE TRACK RAILWAY IN THE WORLD

The G.T.R. Pavilion at the Franco-British Exhibition in England.

At this exhibition, which is being held at Shepherd's Bush, London, Eng., which opened in May, and will run until October, the G.T.R. has erected a beautiful pavilion covering about 2,000 sq. ft. of space in a picturesque spot known as the French Court. This structure follows in design the Renaissance style of architecture with an artistic pillared entrance. Over the entrance rises a group of statuary representing the G.T.R. as speed, with an electric star surmounting the head of the central figure, emblematic of the Star of Empire, and on each side of this figure is represented in smaller figures the Atlantic and Pacific oceans, the central figure joining their hands, representing the spanning of the continent by the National Transcontinental Ry. This allegorical group is a very imposing one, and the idea is appropriate.

The interior of the building is arranged in a combination of color harmony of olive green and red. The scenic views of the G.T.R., as well as views of the summer tourists' districts, and fishing and hunting resorts in Canada, are beautifully portrayed by a series of bromide enlargements finished in a sepia tint and framed in a dull quartered oak. These pictures cover the walls to a distance of 2 ft. from the ceiling, and the entire interior has been set off by a beautiful frieze made up of grains and grasses from Ontario, Manitoba, Saskatchewan and Alberta. In this frieze are embedded specimens of Canadian fish and game mounted in an attractive way the whole forming a unique and pleasing effect. In the centre of the room a pyramid has been erected, on which is shown samples of Ontario cereals, as well as natural samples of fruit from the "Garden of Canada." Animated moving picture machines, projecting fishing, hunting and railroad scenes, are other features on the floor space. Among the special features on display are two exceptionally fine moose heads, one the record head, taken from Ontario, and the other a freak head that will attract a great deal of attention.

S. W. Cummings, who until recently was General Passenger Agent of the Central Vermont Ry., is in charge of this exhibit, the arrangements for which were made by the company's advertising agent, H. R. Charlton.

Reform Movement Among Railway Men.

At a conference of C.P.R. engine and train men running out of Calgary, Alta., recently, papers were read by Conductor E. C. Elson on "Profanity," by Baggageman J. Carson on "Temperance," and by Locomotive Engineer Pullar on "Honesty and Truthfulness." The papers were referred to committees, which reported as follows:

"Your committee appointed to report on the very excellent paper on the subject of Profanity, submitted by Conductor E. C. Elson, beg to report that they deplore the use of profanity and the telling of impure stories, and after fully considering the opinions expressed by all railway men at this conference, your committee recommend that an earnest effort be made by all concerned ~~in~~ railway interests, to abolish profanity on the Western Division for the honor of the company and the general good of the men.—J. M. Fryers, Conductor; J. McMillan, Superintendent of Telegraphs; G. Monilaws, Engineer."

"That it be resolved, That it is the sense of this convention that the use of intoxicating liquor by men engaged in the performance of their daily duties as servants of the railway company should be discouraged in every instance, and that the safety of the travelling public, the preservation of property entrusted to the care of railway employes, and the best interests of the company and employes are best served by total abstinence at all times.—J. R. Dalton, Conductor; J. W. Fay, Engineer; G. M. Reddick, Brakeman; H. C. McMullen, General Live Stock Agent."

"Your committee appointed to report upon the paper read by Mr. Pullar on the subject of 'Honesty and Truthfulness' feel that the case is presented in such a form as must, in the main, be accepted by everyone. We recognize that the first principle in railway life is honesty in every department, and that it should be lived up to by officers and men alike, and constantly practised, without fear or favor, in the relations existing between them. We believe that real efficiency of work must rest upon sterling

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individual honesty, because rules and regulations designed, as the result of long experience, for the safety of life and property, are of very little value unless a large organization such as ours can rely upon the individual honesty of the men in whose hands some portion of responsibility is placed. We respectfully suggest that honesty and truthfulness can be cultivated throughout all branches of the service by means of a cordial understanding between officers and men, on which a man may rely when possibly he is in trouble or difficulty. Although to speak the truth in some cases may mean discipline, we believe that even in such cases anything less than the truth is a sacrifice of manhood which in nine cases out of ten is easily detected, and which yields no satisfaction on either side. As the system of surprise checking has been mentioned, we wish to say, that in our opinion, the man who is honest in his work has noththing whatever to fear from any system of check, and that if looked upon in the proper light the system will be seen to be intended to take care of the weaker men. In conclusion, we feel sure that this conference has contributed largely to a feeling of confidence on the part of the men and of goodwill on the part of the officers, which will mean, a wider acknowledgment of the advantages of being honest in all our dealings and of speaking the truth under all circumstances.—H. Brown, J. Chamberlain, L. R. Ward."

◆

Ontario Railway and Municipal Board.

The second annual report of the Ontario Railway and Municipal Board covers the work for the year ended Dec. 31, 1907. During the year 191 applications were made to the Board, of which eight were pending at the end of the year. Since the date of its first report the Board has made an examination of all the acts—Dominion and Ontario—relating to railways in the Province, in order to ascertain the legislative history of each railway and to settle the question as far as possible of the Board's jurisdiction. The result of this examination is set forth in a table appended to the report, in which appears the names of 490 railways, and a reference to 1,598 acts of the Dominion Parliament and of the Ontario Legislature affecting the same. An examination of these acts showed that there was considerable confusion, particularly in regard to electric railways, as to Dominion and provincial control, and it is submitted there should be a conference between the two Governments with a view of arriving at some understanding which will put all the electric railways under the jurisdiction of the Province. All the railways under the Board's jurisdiction have submitted their tariffs of passenger fares. These tariffs are all in accordance with the law relating to the two cent per mile rate. No complaints have been received by the Board during the year in reference to the fares charged by any railway within its jurisdiction.

Appended to the report are particulars giving some details in regard to each application made to it, the judgments in the more important cases, and a number of statistical tables.

The table giving the number of persons killed and injured during the year shows that 32 were killed and 320 injured. Of those killed seven were passengers, seven employes, 17 were travellers on highways, and one was a trespasser. The table showing the gross and net earnings of the electric railways of the Province contains the same information quoted in the tables given in our Feb. issue, with which other statistical data relating to the electric railways throughout the Dominion were incorporated.

ELECTRIC RAILWAYS.

Sandwich, Windsor and Amherstburg Ry.

The annual report of the Detroit United Ry. Co. for 1907 contains some particulars about its subsidiary, the Sandwich, Windsor and Amherstburg Ry. Co.: Mileage, Jan. 1, 1907, 25.260 miles, to which there was added during 1907 10.1831 miles; interest on funded and floating debt, $18,000; revenue passengers, 2,604.054; transfer passengers, 282,870; employe passengers, 32,153; car mileage, 601,575; earnings, car mile, .2631; expenses car mile, .1748; net earnings car mile, .0883. Under the head of additions and betterments, there was spent during the year on the construction of the Windsor and Tecumseh extension, additions to power house and lighting plant, seven additions cars and construction of tracks on Elm St. loop, including paving and additional feed wire, $92,644.06.

BALANCE SHEET S.W. & A.R. CO.

Capital stock..........		$ 297,000.00
Mortgage bonds........		490,000.00
Bills payable..........		70,000.00
Accrued interest on bonds		1,500.00
Accrued insurance......		542.26
Detroit United Railway.		193,204 23
Accident fund..........		733.28
Current liabilities.......		4,937.61
Unredeemed tickets....		1,932.78
Profit and loss..........		33,518.00
Plant..................	$ 904,428.64	
W. & T.E. Ry. Co. (St'k)	10,000.00	
W. & T.E. Ry. Co......	171,690.50	
Current assets..........	875.80	
Prepaid taxes..........	2,425.34	
Stores................	1,623.14	
Cash..................	2,324.74	
	$1,093,368.16	$1,093,368.16

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Guelph Radial Railway Co.

Following are the accounts for the year ended Sept. 30, 1907, of this company, which is owned by the City of Guelph, Ont.:

ASSETS.

Cash in bank..............	$ 8,500.84	
Cash on hand..............	30.00	
		$ 8,530.84
Accounts receivable..................		191.29
Construction and equipment	$ 16,428.81	
Edinboro' Road extension...	1,298.07	
New equipment............	110.52	
Park.....................	972.63	
Feeder wires..............	20.52	
Car barn..	361.86	
		$ 109,192.42
Stock, rails, ties, etc., for switches.....		580.73
Stock in car barn, etc..................		1,764.98
Insurance unexpired..................		224.83
		$120,485.09

LIABILITIES.

Accounts payable......................	$ 1,521.75
	$118,963.34

NET ASSETS.

Capital stock.............		$ 108,000.00	
Gain at credit profit and loss, Sep. 30, 1906..	$7,024.19		
Dividend 1......	4,860.00		
		3,945.40	
	$2,164.19		
Premium acc'nt..	1,781.21		
Net gain at Sep. 30, 1907.		7,017.94	
			$118,963 34

PROFIT AND LOSS ACCOUNT.

Earnings—	
Passengers..............................	$26,078.36
Freight................................	1,067.86
Advertising.............................	250.00
Rent of hotel and pasture..............	225.04
Rent of power..........................	267.14
Park..................................	250.00
Bank interest..........................	159.61
Sundries..............................	6.00
Total earnings......................	$28,304.01
Expenses—	
Car barn, maintenance..................	$ 3,654.86
Track, maintenance....................	1,167.67
Line, maintenance.....................	287.22
Power house..........................	1,580.48
Passenger operating, wages............	7,151.55
Freight operating, wages...............	242.65
Freight charges, paid..................	72.19
Oil...................................	166.39
Carried forward	$14,323.01
Brought forward.....................	$14,323.01
Coal..................................	2,634 88
Grand Trunk Ry. crossing..............	381.38
Painting and upholstering..............	281.14
Office................................	1,500.50
Stationery............................	165.44
Expense..............................	137.13
Legal................................	56.46
Taxes................................	100.00
Insurance............................	191.19
Park.................................	634.34
Band.................................	437.25
Battery..............................	76.94
Rink.................................	282.81
Hotel................................	83.60
	$21,286.07
Net gain on year's operations..........	7,017.94

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Dominion Power and Transmission Co., Limited.

Following is the first annual report as abridged for circulation: "The directors have much pleasure in submitting their first annual report with reference to the business of the company from its organization to the end of 1907, and the financial statement accompanying same. Accompanying the latter is a combined statement of the receipts, expenditures, profit and loss and final balance of the various companies owned or controlled by this company. This combined statement affords a basis of comparison of the results of the year's operation with those shown in previous annual statements of the Hamilton Cataract Power, Light and Traction Co. The incorporation of this company was the result of necessary increase in the financial capacity of the Hamilton Cataract Power, Light and Traction Co., which has become inadequate to meet the expansion of that company's business and the probable extension of its field of operation, and this company's charter from the Dominion of Canada was framed with a view to the acquisition by this company of the control, and practically the taking over, of the business of the Hamilton Cataract Power, Light and Traction Co. In view of the fact that four-fifths of the stock of the latter company has been acquired by this company, it may be regarded as a successor to that company and its business; but on a larger scale.

"The following subsidiary companies are now either directly or indirectly owned or controlled by this company, viz.: The Hamilton Radial Electric Ry. Co., the Hamilton Street Ry. Co., the Hamilton and Dundas St. Ry. Co., the Dundas Electric Co., the Hamilton Electric Light and Power Co., and the Lincoln Electric Light and Power Co., which are immediately subsidiary corporations of the Cataract Co., while this company has acquired the direct ownership of the entire stock of the Brantford and Hamilton Electric Ry. Co., the Western Counties' Electric Co., with its subsidiary corporation, the Brantford Electric and Operating Co., as well as the Hamilton Terminal Co., and control of the Welland Electric Co., and the Hamilton, Grimsby and Beamsville Electric Ry. Co.

"The completion of the Hamilton terminal station building during the latter part of last year has enabled this company and all other companies to transfer their office operations to these premises, and all the suburban railway companies to take advantage of the very desirable terminal facilities thereby afforded. This company has become, and is acting as the administrative authority for all the companies, resulting in a more methodical and efficient, as well as economical, conduct of business. The completion of the construction of the Brantford and Hamilton Electric Ry. was greatly retarded by unexpected difficulties in connection with the mountain section thereof—heavy rock and earth slides having occurred which were not anticipated and could not have been obviated. The rails of that line of railway have been laid into Brantford, and cars have been for some time past

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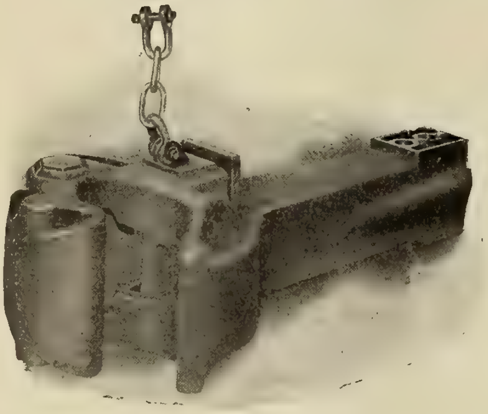

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regularly running as far as Ancaster, and it is expected that the whole line will be in full operation sometime during May, and the prospects of a good traffic seem to be very encouraging. The Western Counties' Electric Co., with its established business, has had a prosperous year, and in view of the fact that a power transmission line from Hamilton has been completed to a connection with the power system of that company, thus affording direct connection with our main power station at Power Glen, there should, and probably will be, a considerable expansion of power business in Brantford. The Welland Electric Co. has been, during the first year of its business, quite successful, although meeting with direct opposition at that point from one of the Niagara companies.

"Two half-yearly dividends have been paid out of the proceeds of the company's business during the past year; but by reason of the large expenditures in the Brantford and Hamilton Electric Ry. and in connection with the double-tracking of the Radial Railway on private right-of-way, from which capital expenditures no revenue returns can be said to have been realized during the year, the income of the company cannot be regarded as having reached a normal relation to its investments. Your directors have every confidence in the working out of the company's enterprises and the realization of a most prosperous future career."

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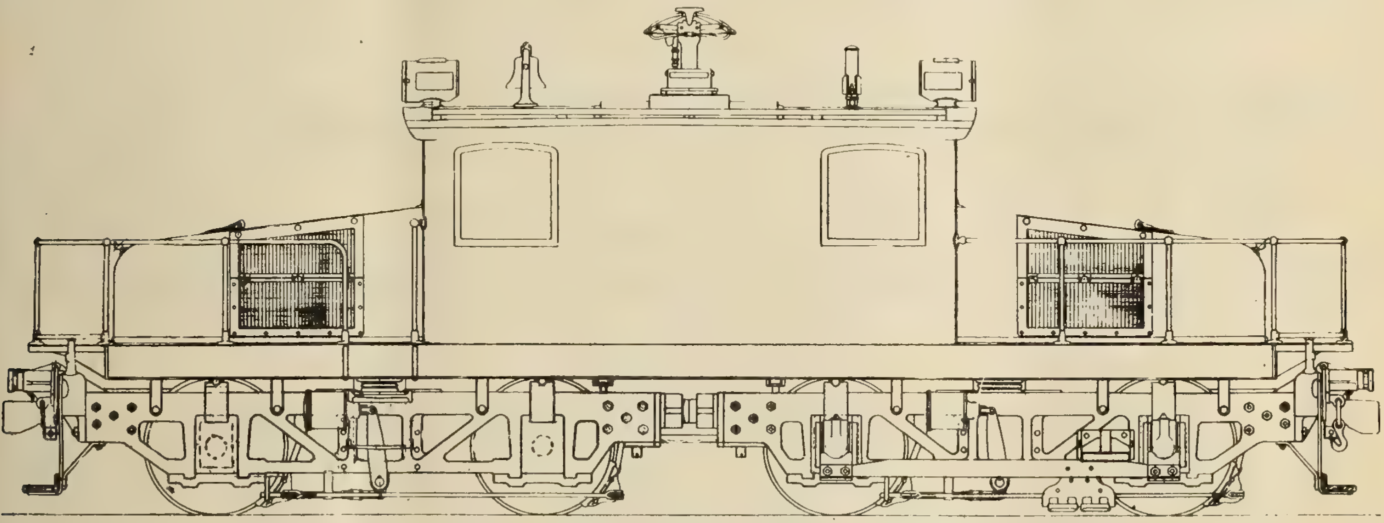
Detroit River Tunnel Electric Locomotives.

The accompanying illustration shows the side elevation of one of the six electric locomotives now being built for the Detroit River Tunnel Company, a subsidiary of the Michigan Central Ry., by the American Locomotive Co. and the General Electric Co. These locomotives will be used to haul both passengers and freight trains through the tunnel now being constructed under the Detroit River from Detroit, Mich., to Windsor, Ont. They are moderately slow-speed machines and weigh 100 tons on the drivers. The frame is of the articulated type, and consists of two 4-wheel trucks hinged together. The trucks are of a very solid construction with cast-steel side frames of truss pattern carried on semi-elliptical journal box springs. The diameter of the driving wheels is 48 ins. The draft rigging is carried directly on the outer end frames of each truck, the two trucks being fastened together by substantial hinges and pins. By adopting this method of construction, the draft of the locomotive is carried directly through the truck frames, and the centre pins are relieved of all hauling strains.

The superstructure consists of a main operating cab and two auxiliary end cabs. The main cab is 15 ½ ft. long, and contains the engineer's operating mechanism and valves, while the contactors, rheostats and air reservoir are contained in the auxiliary cabs. The height of the end cabs is such as to permit the engineer to obtain a good view of the tracks. Easy access to the couplers is provided by a narrow platform running from the main cab to the ends of the locomotives.

The electrical equipment of each locomotive consists of four GE-209 motors and the multiple-unit train control. Each motor will develop approximately 300 h.p., and at its hour rating will develop a tractive effort of 9,000 lbs. at a speed of 12 miles an hour, while a complete locomotive is capable of hauling a 900-ton train up a 2% grade at the required schedule speed. The motors are of the commutating pole type, and are among the largest units of this type yet constructed for railway work. The current will be supplied to the motors from an inverted third rail at a potential of 600 volts.



ELECTRIC LOCOMOTIVE FOR MICHIGAN CENTRAL RAILWAY TUNNEL UNDER DETROIT RIVER.

On account of the high torque developed, which amounts to 4,050 lbs. at a radius of 1 ft., a pinion is mounted on each end of the motor shaft.

The motors will be cooled by forced ventilation, a blower having a capacity of 2,000 cubic feet per minute being installed in the main cab for this purpose. A separate compressor of type CP-26 with a capacity of 100 cubic feet per minute piston displacement provides air for operating the air brakes. The principal dimensions are as follows:

Length, inside to inside knuckles	39 ft. 6 in
Length of underframe	34 ft.
Width over all	10 ft. 1 in.
Height from rail to retracted position of contact shoe	14 ft. 10 in.
Main cab	15 ft. 10 in. by 10 ft.
Truck wheel base	9 ft. 6 in
Total wheel base	27 ft. 6 in
Centre to centre of trucks	18 ft.

—Railway Age.

◆

C. H. Grantham, father of A. M. Grantham, Purchasing Agent, Toronto railway, died in Toronto, May 4, aged 59.

N. Cantin, St. Josephs, Ont., who is engaged in promoting a number of enterprises, including the St. Josephs and Stratford Radial Ry., has issued a writ against Z. and Mrs. Gallagher, Toronto, to prevent them dealing with various enterprises in which he is interested. Some little time ago Mr. Gallagher had Mr. Cantin arrested for alleged fraud arising out of some financial transactions between them.

Fenders for Toronto Railway Cars.

The Ontario Railway and Municipal Board made the following order May 6 on the application of the City of Toronto:

"The Board have approved of three fenders for use in front of each motor car, as suitable for the use of the Toronto Railway Co., having regard to the efficiency of each fender. These fenders are the Jenkins, the Quin and the Watson's Improved Type 1908. The company have a right to use any or all of these fenders upon their system. The city asked for an order that the company equip their system with a fender approved by the Board without specifying, and properly so, what fender the company should use. The law requires that the company should adopt and use in front of each motor car a fender as shall be of a design approved from time to time by the Board as suitable for the use of the company, having regard to the efficiency of such fender for life-saving purposes and to the location of the company's line and the speed at which the company's cars may run. It is the prerogative of the Board to approve of a fender. They have no power to dictate to the company which of the approved fenders the company shall use. Even if the Board had power to so dictate to the company, it would be inexpedient and extremely improper to take sides in contests between rival inventors, and the Board declines to do so. We order the company to equip their system with a fender approved by the Board.

"The only question now remaining for determination is as to the time within which the company should equip their cars with an approved fender. None of the fenders approved by the Board are stock fenders. They are not a commercial commodity. They require to be manufactured specially for the Toronto Railway system. By sec. 20 of the contract between the city and the company, the company are required to manufacture and repair all the cars and railway plant used on their railway during the term covered by the agreement. The performance of this part of the contract may be specifically enforced. Outside of the requirements of their own plant, the company are not manufacturers. The fenders must be manufactured by the company with such facilities as they have in connection with their car shops. They cannot go outside of the city of Toronto and procure these fenders in the market. Patterns are required to be made and the special parts require to be cast. The evidence adduced by the company is to the effect that it will take nine months to manufac-

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ture the fenders and equip their cars. The system is partially equipped with the Jenkins fender. The Jenkins Co. say that they could furnish the number of fenders to complete the equipment in four weeks. The Board have no power to compel the company to use the Jenkins fender to the exclusion of the other two. The public interest requires that the system should be equipped with an approved fender in the shortest possible time. Although the company are entitled to a reasonable time to comply with the order of the Board, yet the Board feel like shortening the time to the shortest possible limit.

"The Board's order is that the company forthwith commence to manufacture and with the utmost despatch equip their system with a fender approved by the Board, the whole system to be so equipped within six months from the date of this judgment.

"The Board makes no order as to costs except that the company shall provide the stamps necessary for the formal Orders."

◆

Projects, Construction and Betterments.

Brantford and Hamilton Ry.—This line was opened for traffic May 23, the schedule time for the 25 mile run being 45 minutes. The company proposes to erect a station in Brantford, Ont., on South Market St. (April, pg. 282.)

British Columbia Electric Ry.—It is reported that the company has leased or purchased the present line of the Great Northern Ry. between New Westminster, B.C., and the International boundary at Blaine, Wash. (New Westminster Southern Ry.), that it will enter into possession as soon as the new line from Cloverdale to Blaine is completed, and that the N.W.S.R. will then be electrified and operated as an electric line.

The question of constructing a second track on the Vancouver and Lulu Island Ry., operated under an agreement with the C.P.R., was discussed at a recent meeting of the Vancouver City Council, and the company's local Manager promised that the matter would be brought before the C.P.R. The city council desires to have a local service in operation over the line.

Tenders are under consideration for the construction of the first section of the proposed electric railway to Chilliwack. The section which it is proposed to construct at once extends from New Westminster to Cloverdale, about 12 miles; and the work covered by the tenders embraces everything necessary to make the roadbed ready for putting down the rails. A steamer has been chartered by the company for carrying over 8,000 tons of 70 lb. steel rails for use on the line, from Liverpool, Eng., to Vancouver, via Cape Horn.

A number of property owners have in preparation a proposal to make to the company with a view of having a line constructed from Victoria to the Ross Bay cemetery. If the plan is accepted by the company, construction can be started Aug. 1, and the line completed this year. The proposed new route leaves Fort St. at Cook St., and follows Cook and May Streets to the Ross Bay cemetery and down the Fairfield road to Foulbay road. (May, pg. 353.)

Calgary.—A meeting of the special committee appointed by the Calgary, Alta., City Council was held May 6, to consider an offer from P. A. Rodrigue, to construct a street railway according to the plans adopted by the council in 1907, for the amount of money mentioned in the by-law, voted upon by the taxpayers, and to operate the line for five or ten years for a percentage of the profits. The discussion of the matter was deferred pending the submission of a more definite offer. (May, pg. 353.)

Edmonton.—Considerable progress has been made with the laying of steel on the paved portions of First St. and Namayo Ave., Edmonton, Alta., and it is expected to have about 3¾ miles of track laid by the fall. In the construction of the track, 7", 80 lbs. T rails and steel ties have been used. The city council has been approached by an English syndicate with an offer to take over, construct and operate the railway, but nothing definite has yet been done. (May, pg. 353.)

Grand Valley Ry.—The route of the proposed extension from Brantford to London, Ont., has been approved of by the municipalities interested for the entire distance, with the exception of a small section east of Ingersoll, and a short distance near London. It has been agreed that the route through these sections will be settled at a later date, subject to the final approval of the Railway Commission. The agreement with the city of Brantford was made subject to the agreement now existing between the city and the company with regard to the streets and the strengthening of certain bridges. Application was made at Ottawa, April 29, for the approval of the route so far as agreed upon by the Department of Railways.

The company's existing line between Brantford and Galt is being relaid with 80-lb. steel. (May, pg. 353.)

Hull Electric Co.—The city council of Hull, Que., passed a resolution, May 4, approving of the terms upon which it would be willing to grant the company the privilege of double-tracking its lines in the city. The terms include the construction of several short pieces of line, the keeping in repair of track allowances, the improvement of the service, and the paving of certain streets; the new franchise to expire in 35 years from 1905, the same as the existing charter. (Sept., 1907, pg. 683.)

Moncton.—At a meeting of the Moncton, N.B., Board of Trade, May 7, consideration was given to the bill authorizing the city council to construct a street railway, and the Westmoreland Power Co.'s bill giving it authority to construct a number of electric lines, including one through Moncton. F. W. Sumner pointed out that there was already a company in existence having a charter to construct a line in the city; a line had been constructed under it, but it had been torn up; the stockholders, however, believed that they still had the right to construct a line. The Board's legislative committee was asked to look into the whole matter. The city council has also passed a resolution authorizing the city solicitor to examine the different bills and make suggestions thereon. (Sept., 1907, pg. 683.) See also Westmoreland Power Co.

Montreal and Southern Counties Ry.—It is reported that work will be re-started at once upon the construction of the St. Lambert section of this projected railway at Montreal South and at Longueuil, Que. A contract has been let to the Dominion Bridge Co. for the steel work on Black's bridge, and to a U.S. firm for the marine cables across the Lachine Canal. (May, pg. 353.)

Mount McKay and Kakabeka Falls Ry.—We are advised that the surveyed route for this projected railway will follow the main road from Fort William to Kakabeka Falls, Ont., about 15 miles. Two of the curves, those entering the city, will be very sharp, being only 50 ft. radius; the remainder will not exceed 22°. The gradients will not exceed 5%. The track will be laid with 80-lb. steel. Power will be purchased from the Kaministikwia Power Co., at 2,200 volts, three phase, 60 cycle, and transformed by motor generator sets in the sub-station to 600 volts direct current. G. R. Duncan is engineer. (May, pg. 353.)

Niagara, St. Catharines and Toronto Ry.—The company opened its new line to Welland, Ont., for traffic May 4, giving practically an hourly service to Thorold, St. Catharines and Niagara Falls, from Welland. (April, pg. 283.)

North Midland Ry.—It is expected that contracts will be signed for the construction of the first section of this line, from London to St. Mary's, very shortly, and that construction will be gone on with during the summer. (Mar., pg. 203.)

Ontario West Shore Electric Ry.—Survey parties started from Goderich, Ont., April 28, to make a preliminary survey for the line along the shore of Lake Huron to Kincardine, about 30 miles. The survey is in charge of V. M. Roberts, formerly on the engineering staff of the Guelph and Goderich Ry.

We are advised that the present intention is to build the section from Goderich to Kincardine and that a contract has been let to the Huron Construction Co., which will probably sublet the work. It is also stated that work will be started at an early date and that it is expected to have the Goderich-Kincardine section built by next spring. The persons who control the O.W.S.E.R. charter are also interested in the Maitland River Power Co., which proposes to build a power plant at Black Hole, about 3 miles from Goderich, and which will supply power for the electric railway. (May, pg. 353.)

St. John Ry.—We are advised in connection with the report referred to in our last issue, that the company has not had before it a proposal to construct a line to Westfield, which is 12 miles out of St. John, N.B., on the C.P.R. The length of the extension to Westfield, according to the press report, is 3½ miles. The report is looked upon as a hoax by the Manager, who states that if the Charles Diggs who was referred to in the papers as being the Secretary, is the Charles Diggs who lives in St. John, there is not much chance of the line being a grand success, as "Mr. Diggs is a colored gentleman, selling matches, shoestrings, etc., on the streets."

The question of an extension of the city lines to Rockwood Park has been urged by members of the Horticultural Association, but the company's reply is that in the present state of the money market, the extension is out of the question and cannot even be considered. (May, pg. 355.)

St. Thomas Street Ry.—The general plans for the subway at Ross St., St. Thomas, Ont., have been agreed upon between the engineers of the Michigan Central Rd. and the City Engineer. The plans provide for the division of the roadway into two sections, one 14 ft. wide for the street car traffic, and the other 26 ft. wide, for ordinary traffic. The work is to be done by contract and will be gone on with at once. (Mar., 1907, pg. 191.)

Sarnia Street Ry.—The extension of the line from Wellington St. to River Road, Sarnia, Ont., 1.25 miles, is expected to be completed by July 1. The electrical equipment is being supplied by the Canadian Westinghouse Co. (Mar., pg. 203.)

The Toronto and York Radial Ry. has a large number of men employed in putting in new ties, and in ballasting the line between Newmarket and Jackson's Point, Ont. A station and freight shed are to be erected at Queensville, and a car house and repair shop are to be erected at Deer Park. It is also proposed to construct an extension from Jackson's Point to Sutton, about 1.50 miles. (Jan., pg. 47.)

The Toronto Ry. Co. has notified the city council that it is desirous of laying certain additional lines on city streets, and asking for approval of the same. The company is also applying to the Ontario Railway and Municipal Board for approval of the same lines. (May, pg. 55.)

Toronto Suburban Ry.—Owing to the difficulties in the way of coming to an agreement

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1,500 MILES UP THE GREAT LAKES
Frequent Sailings from Sarnia for Soo, Port Arthur, Fort William and Duluth

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NIAGARA NAVIGATION COMPANY

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NIAGARA NAVIGATION COMPANY LIMITED

WRITE FOR ILLUSTRATED BOOKLET

DINING SERVICE ON ALL STEAMERS

B. W. FOLGER, MANAGER, TORONTO, CANADA

with the municipal council, it is officially stated that the company has decided for the present to abandon its projected extension to Swansea. (May, pg. 355.)

Westmoreland Power Co.—Application is being made at the current session of the New Brunswick Legislature for an act incorporating a company with this title, with power, among other things, to construct and operate electric railways in the city of Moncton, and throughout the counties of Westmoreland, Kent and Albert. The provisional directors are: C. A. Murray, J. A. Nile, E. A. Smith, G. J. Sproul and R. McManus. (See Moncton.)

Windsor, Essex and Lake Shore Rapid Ry.—The extension of the line from Kingsville to Leamington, Ont., 10 miles, was opened for traffic April 10. The company's line extends from Windsor to Kingsville, 30 miles; and from Kingsville to Leamington, 10 miles, a total distance of 40 miles. (April, pg. 283.)

Winnipeg, Selkirk and Lake Winnipeg Ry.—The electrical equipment of this line has been completed, and the first car, propelled by electricity, has travelled from Winnipeg to Selkirk, Man. A regular service will be operated early in June. The line is owned by the Winnipeg Electric Ry. (Feb., pg. 121.)

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Electric Ry. Finance, Meetings, Etc.

Berlin and Waterloo Electric Ry.—The appeal of the company against the city of Berlin, in connection with the recent arbitration proceedings, was argued before the Ontario Court of Appeal, May 19, and judgment has been reserved. The question at issue is as to whether the value of the franchise should or should not be included in the price to be paid the company by the city. The arbitrators fixed the amount to be paid by the city at $75,000, and the company claims $213,000.

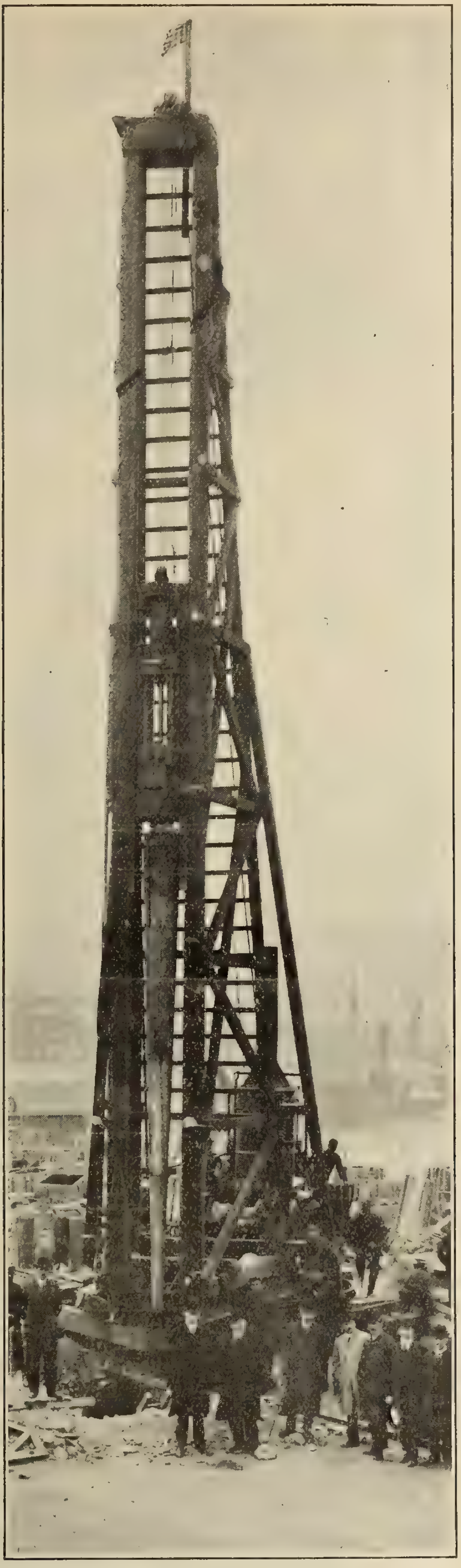
British Columbia Electric Ry.—Gross earnings for March, $158,339; operating expenses, $94,114; net operating earnings, $64,225; renewal funds, $10,750; net earnings, $53,475; income from investments, $11,036; net income, $64,511; against $119,363 gross earnings; $65,665 operating expenses; $53,698 net operating earnings; $9,325 renewal funds; $44,373 net earnings; $9,536 income from investments; $53,909 net income, for Mar., 1907. Gross earnings for 9 months ended Mar. 31, $1,490,260; net earnings, $727,130; against $1,072,913 gross earnings; $530,441 net earnings for same period 1906-07.

Buffalo, Rockport and Rochester Ry.—It is reported that negotiations for the purchase of this line, which it is expected will be opened for traffic during the summer, have been opened by New York financial interests said to be allied with the New York Central and Hudson River Rd. F. Nicholls and E. R. Wood, Toronto, who are interested in the company, which was organized in connection with the development of power at Niagara Falls, returned to Toronto May 8, after going over the line. Mr. Wood said there was nothing in the talk about the proposed sale.

Dunnville, Wellandport and Beamsville Ry.—The taxpayers at Dunnville, Ont., May 10, passed a by-law to purchase $30,000 of the company's bonds.

Halifax Electric Tramway Co.—Receipts for April, $13,303.12; against $12,882.13 for April, 1907. Receipts for 4 months ended April 30, $51,213.85, against $48,725.80 for same period, 1907.

Hamilton Street Ry.—After lengthened negotiations an understanding has been reached between a special committee of the Hamilton City Council and the Dominion Power and Transmission Co., owners of the



The core and shell of a Raymond concrete pile preparatory to placing. By means of the core the shell is driven to refusal. The core is then withdrawn and the shell filled with concrete.

THE RAYMOND CONCRETE PILE

The sheet steel shell which permanently encases each Raymond pile is first placed in position by means of a collapsible core, which alone receives the impact of the hammer.

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RAYMOND CONCRETE PILE CO'Y OF CANADA
519-520 CORISTINE BUILDING, MONTREAL

H.S.R. The company asks that the city guarantee the company's bonds for the money required to fix up the system, to accept 6 instead of 8% on receipts over $316,000, no mileage to be charged on the extensions; to make a fixed assessment on the plant, machinery, etc., of the Street Ry., the company to consent to the 5 ft. devil strip, and the company to pay percentage on the receipts of the Deering division. The special committee was not in a position to present a definite report to the council May 11, and its powers to negotiate were continued.

London St. Ry.—Gross earnings for Mar., $16,907.90; operating expenses, $13,015.97; net earnings, $3,891.93; against $17,716.85, gross earnings; $13,805.13, operating expenses, $3,911.72, net earnings for Mar., 1907. Gross earnings for 3 months ended Mar. 31, $50,287.14; operating expenses, $38,731.69; net earnings, $11,555.45; against $49,914.29 gross earnings; $38,746.60, operating expenses; $11,167.69, net earnings for same period 1907.

Montreal Street Ry.—Reports state that J. L. Shaw, New York, who was recently in Montreal, was engaged in negotiating for the purchase of a large interest in the M.S.R., and the Montreal Light, Heat and Power Co., for some New York financial interests.

At the last session of the Quebec Legislature an Act was passed authorizing the company to issue warrants or certificates to bearer for shares in the company, to be issued in such manner and form, and upon such terms and conditions as may be fixed by by-law. The deed of conveyance in trust executed by the company in favor of the Royal Trust Co., Feb. 29, for the purpose of securing bonds or debentures of the company issued or to be issued, is ratified and confirmed. In the schedule attached to the act the trust deed is set out in full.

Gross earnings for April, $280,735.83; operating expenses, $170,141.23; net earnings, $110,594.60; city percentage on earnings, $19,727.73; interest on bonds and loans, $17,323.08; contingent for renewals, $13,850.06; rent leased lines, $444.43; surplus, $59,249.30; against $274,635.30 gross earnings; $166,421.98, operating expenses; $108,213.32, net earnings; $19,015.68, city percentage on earnings; $12,434.90, interest on bonds and loans; $13,527.02, contingent for renewals; $339.96, rent leased lines; $62,893.76, surplus for April, 1907. Aggregate gross earnings for 7 months ended April 30, $2,027,872.71; operating expenses, $1,316,006.96; net earnings, $711,865.75; fixed charges, $323,987.31; surplus, $387,878.44; against $1,873,683.75, aggregate gross earnings; $1,240,078.94, operating expenses; $633,604.81, net earnings; $284,195.98, fixed charges; $349,408.83, surplus for same period 1906-07.

Port Arthur St. Ry.—Several meetings have been held by the joint committee appointed by the Port Arthur and Fort William City Councils, to endeavor to arrange a price for the sale by the former city to the latter of the portion of the Port Arthur street railway within its limits. The Port Arthur delegates set a definite price on their line at $162,000, which is considered too high.

Sarnia Street Ry.—Gross income for year ended Dec. 31, 1907, $37,608, against $36,234 for 1906; operating expenses, $27,583, against $24,685; net earnings, $10,025, against $11,549; deductions, $3,384; dividends, $4,459; surplus, $2,282; against a surplus of $3,760 in 1906.

Toronto Ry.—The city authorities have reduced the assessment on the company's property from $200,000 to $150,000.

Car earnings for April, $272,929.02, against $261,608.68 for April, 1907. Total earnings for 4 months ended April 30, $1,075,496.61, against $1,014,586.14 for same period, 1907.

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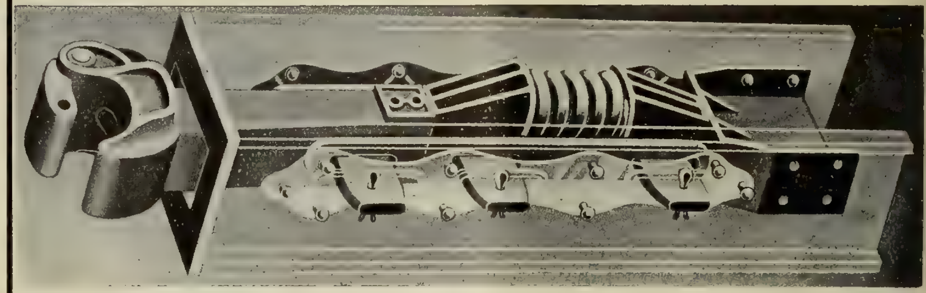
FARLOW TWIN SPRING DRAFT GEAR



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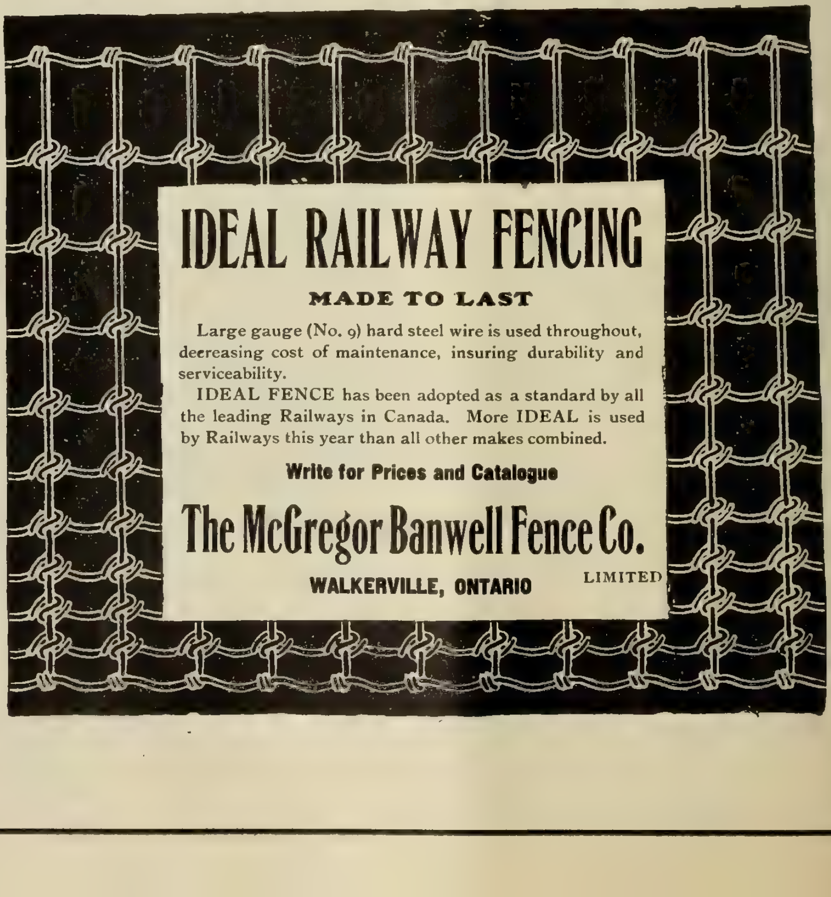

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WALKERVILLE, ONTARIO

Electric Railway Notes.

The Toronto Ry. propose constructing a number of cars for its own line during the summer, as well as six for the Monterey St. Ry., Mexico.

The Nelson, B.C., Electric Tramway's car barns were burned April 27, the loss being placed at $15,000. The property burned included two street cars.

Wm. C Hawkins, General Manager of the Dominion Power and Transmission Co., returned to Hamilton, Ont., recently from a lengthened trip to Bermuda.

J. C. M. Buntzen, Managing Director British Columbia Electric Ry., left Vancouver, B.C., April 24, to return to London, Eng., after his annual inspection of the company's lines.

The British Columbia Electric Ry. has given instructions for the equipment of all its cars with a wire life guard, and for installing automatic air brakes on all double-truck cars.

The hearing of the case against the City of Port Arthur, Ont., as owner of the Port Arthur Street Ry., for operating its cars on Sundays, has been adjourned by the Ontario Railway and Municipal Board.

The Port Arthur Street Ry. Commissioners put in operation a 15-minute service on the line between Port Arthur and Fort William, Ont., May 4, the service to be a continuous one—day and night.

The employes of the Winnipeg Street Ry. have settled their differences with the company, each side having conceded some points. At Ottawa, however, the men and the company have not come to an agreement, and the men have asked for the appointment of a board of arbitration.

Arising out of an accident at a crossing of the public road by the Windsor, Essex and Lake Shore Rapid Ry., the coroner's jury at Kingsville, Ont., has made a recommendation that companies be directed to sound warning bells at all level crossings, and that all cars be equipped with air brakes.

The Sandwich, Ont., Town Council is applying to the Ontario Railway and Municipal Board to order the Sandwich, Windsor and Amherstburg Ry. to produce its agreement with the town. The copy of the agreement originally possessed by the Town Council was burned about 20 years ago in a fire.

The Ontario Ry. and Municipal Board has approved the Sandwich, Windsor and Amherstburg Ry.'s rules and regulations, with certain amendments. Among the changes made is a provision that no person shall stand on the side steps or on the front platform of any passenger car, or be on the steps of any baggage or freight car.

The question of the removal of snow from the Montreal streets which has been in dispute between the Montreal Street Ry. Co. and the City Council has again been under discussion. A draft proposal, to which representatives of the company have agreed, has been approved by the Roads Committee and will be submitted for adoption by the Council at an early date.

Grain Elevator Notes.

The Caron Farmers' Elevator Co., Ltd., Caron, Sask., has increased its capital from $7,500 to $25,000.

The Independent Elevator Co., Ltd., has been incorporated under the Northwest Territories ordinance, with head office at Calgary, Alta.

The Montreal Harbor Board announced May 5 that the conveyor equipment on shed 4, Alexandra pier, and sheds 7 and 9, King Edward pier, was completed, and that grain could be delivered from the elevator to vessels berthed at these sheds.

The G.T.R. has decided not to replace the elevator destroyed by fire, April 21, at Toronto. It is stated that at the time of the fire only 15,000 bush of grain were in store there, whereas the capacity was 262,000 bush., and that the amount stored had decreased each year for some time.

Excess Baggage Rates.—The call for the annual meeting of the American Association of General Baggage Agents, to be held at Milwaukee, Wis., June 17, has been issued in unique form by the Secretary-Treasurer, J. E. Quick, General Baggage Agent G.T.R., Toronto. The notice respecting the meeting is printed on the outside of a cardboard case, which contains a card giving in very convenient form the excess baggage rates compiled on a basis of 16 2-3%. Commencing July 1, this basis will be used on business from points in Canada to points in the U.S., and from points in the U.S. to points in Canada, but no change will be made in the present Canadian excess baggage tariff applicable between points in Canada

The Eastern Steamship Co. has placed the turbine steamers Yale and Harvard on the Boston-St. John, N.B., route. The service commenced May 11.

C. Doutre, heretofore in charge of the Dominion Government's wireless telegraph service stations, has been appointed Purchasing Agent of the Department of Marine and Fisheries at Ottawa.

The C.P.R. motor car, which was described and illustrated in our issue of Aug., 1906, and which ran that season between Montreal and Vaudreuil, Que., was placed in service between Toronto and Brampton, Ont., June 1. Its schedule is: Leave Brampton 7.30 a.m., arrive Toronto 8.48 a.m. Leave Toronto 1.30 p.m., arrive Lambton Golf Club 1.50 p.m. Leave Toronto 6,15 p.m., arrive Brampton 7.40 p.m. On Saturdays the 1.30 trip to the Lambton Golf Club will be extended to Brampton. The car will not run on Sunday.

MARINE DEPARTMENT

LIST OF STEAM VESSELS REGISTERED IN CANADA DURING ARRIL, 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
Alberni	126,072	Vancouver, B.C, 1908	Screw, 8 N.H.P	44.0	11.6	5.7	28	19	Vancouver, B.C	Vancouver Dredging and Salvage Co., Ltd., Vancouver, B.C.
Charles Lyon	125,975	Toronto, 1908	“ 161 “	280.0	40.0	19.9	1658	1127	Toronto, Ont	Polson Iron Works, Ltd., Toronto.
Faultless	122,197	N. Westminster, B.C., 1907	“ 39 “	102.0	21.0	10.5	145	95	N. Westminster, B.C.	Westminster Towing and Fish Co., Ltd., New Westminster, B.C.
Hilford	122,426	Tancook, N.S., 1908	“ 8 “	64.5	15.2	6.5	38	26	Halifax, N.S	J. Foster Root Co., Ltd., Halifax, N.S.
Jack Stuart	122,391	Victoria, B.C., 1908	“ 6 “	60.0	13.0	3.5	36	18	Victoria, B.C	A. Stuart, Duncan, B.C.
Knight	126,076	Vancouver, B.C., 1908.	“ 4 “	44.5	12.0	5.7	21	14	Vancouver, B.C	R. E. Gosse, Vancouver, B.C.
Pt. Simpson	122,390	Victoria, B.C., 1908	Paddle 15 “	136.6	30.4	5.4	607	379	Victoria, B.C	Hudson's Bay Co., London, Eng.
Seacrest	122,425	Tancook, N.S., 1908	Screw 6 “	49.5	12.7	5.6	18	12	Halifax, N.S	J. W. Smith, Halifax, N.S.
Western Slope	122,392	Sooke, B.C., 1907	“ 1½ “	42.8	14.0	6.4	19	12	Victoria, B.C	R. Cains, Victoria, B.C.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING APRIL, 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross Tons	Reg. tons.	Port of Registry.	Owners.
Annie E. Banks.	122,319	La Have, N.S., 1908	Schr.	92.2	27.0	10.6	..	135	Lunenburg, N.S	A. M. Banks, Halifax, N.S.
Clintonia	122,315	Lunenburg, N.S., 1908	“	108.4	25.8	10.8	..	96	“ “	W. C. Smith, Lunenburg, N.S.
Cobalt	122,641	Buffalo, N.Y., 1873	Barge	146.6	26.6	11.4	..	307	Ottawa, Ont	J. Buckly, Prescott, Ont.
D. C. Mulhall	126,033	Liverpool, N.S., 1907	Schr.	70.5	18.4	7.1	..	42	Liverpool, N.S	J. E. Conrad, LaHave, N.S.
Delver No. 1	126,091	Welland, Ont., 1908	Dred.	100.0	37.0	6.5	..	305	St. Catharines, Ont.	Dominion Dredging Co., Ltd., Ottawa.
E. Daneau	126,141	Pierreville, Que., 1908	Sloop	108.7	23.1	6.9	..	127	Sorel, Que	W. Gill, Pierreville, Que.
E. M. Walters	122,318	Lunenburg, N.S., 1908	Schr.	94.2	24.7	10.2	..	97	Lunenburg, N.S	W. N. Reinhardt, LaHave, N.S.
Freeport	122,642	Clayton, N.Y., 1875	Barge	145.0	26.4	9.8	..	276	Ottawa, Ont	J. Buckly, Prescott, Ont.
Goldie Belle	122,316	Mahone Bay, N.S., 1908	Schr.	88.2	24.2	9.2	..	79	Lunenburg, N.S	A. Ernst, Mahone Bay, N.S.
Irma Bentley	125,962	Pt. Greville, N.S., 1908	“	151.5	35.5	12.4	..	414	Parrsboro, N.S	G. E. Bentley, Port Greville, N.S.
Jack Canuck	126,073	Vancouver, B.C., 1907	Sloop	29.6	10.8	4.8	..	11	Vancouver, B.C	R. K. Scarlett, Vancouver, B.C.
Jessie Gertrude	122,320	Mahone Bay, N.S., 1908	Schr.	46.2	12.3	6.4	..	17	Lunenburg, N.S	C. Mosher, Canso, N.S.
Lucien	121,949	Sorel, Que., 1907	Sloop	110.0	23.2	7.4	..	136	Sorel, Que	E. Lizotte, Pierreville, Que.
R. H. Pentz	126,034	Liverpool, N.S., 1908	Schr.	99.8	25.5	10.3	..	99	Lunenburg, N.S	A. V. Conrad, LaHave, N.S.
S. Hubley	122 317	Tancook, N.S., 1908	“	45.8	12.6	6.4	..	18	“ “	W. Hubley, Indian Harbor, N.S.
T. Voges	122,639	Black River, Ohio, 1876	“	103.2	24.1	7.9	..	132	Kingston, Ont	F. Barnhardt, Deseronto, Ont.

Fluctuations in Lake Freight Rates.

The statistical report of traffic passing through the Canadian and U.S. canals at Sault Ste. Marie, prepared by the U.S. Army Corps of Engineers, gives some interesting facts regarding the fluctuations in the freight rates for water transportation to Lake Superior charged on the different classes of commerce, for 20 years, from 1887 to 1907. In each of the cases quoted, with only one exception, the rates were considerably lower in 1907 than in 1887, and in a majority of cases the lowest level was reached during 1907. Following are rates charged on the main items, for the years 1887-1897-1907:

	1887	1897	1907
Coal, net tons	$0.90	$0.30	$0.31
Flour, brls	0.29	0.10	0.20
Wheat, bush	0.07	0.017	0.019
Grain (not wheat), bush	0.07	0.02	0.019
Manufactured iron, net tons	2.35	1.40	1.80
Pig iron, net tons	2.35	1.05	1.50
Salt, brls	0.18	0.15	0.12
Copper, net tons	2.60	1.95	1.40
Iron ore, net tons	1.75	0.65	0.67
Lumber, M. ft. B.M.	4.00	1.55	2.50
Silver ore, net tons	3.00	2.33	....
Building stone, net tons	1.15	1.50	1.50
General merchandise, net tons	4.00	2.30	2.00

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Northern Navigation Co.'s New Vessel.

In our April issue we gave a number of particulars about the steamship which the Northern Navigation Co. is having built for its trade on Lakes Huron and Superior, and in this issue we give an illustration of the vessel. The following additional particulars have been given out: She will be equipped with two pole spars and single smoke funnel, will have straight stem and elliptical stern. The cabins will be capable of accommodating over 400 first-class passengers, about 70 second-class passengers, and about 100 of a crew. The first-class dining room will seat 180 people. The galley, storerooms, refrigerators and pantries will be large and will be equipped with latest modern devices. The passengers will enter on the main deck amidship and pass up a broad stairway to the waiting room on the spar deck, where they will secure accommodations from the purser and steward, whose offices and quarters will be facing the waiting room. The staterooms will be located forward and aft of this waiting room with bathrooms, closets and lavatories grouped conveniently, and the staterooms and quarters on this deck will be lighted by 20-in. brass headlights arranged along each side. A broad stairway will lead from the waiting room to the social hall on the awning deck. This room will be designed for the purpose of a general assembly room. The dining room will be directly aft of this social hall, and staterooms and parlor suites directly forward with a drawing room forward of the parlor suites. The galley and stores will be directly aft of the dining room, and the smoking room and buffet is at the after end of this deck.

A prominent feature of the awning deck will be a clear 6-ft. walk at each side of the ship leading from forward to aft, making a very desirable promenade. Leading directly from the social hall will be two stairways to the observation room on the promenade deck. This observation room will be 80 by 28 ft., and will be practically a glass house, or sun parlor. It will be conveniently arranged to be used for a ballroom or place of entertainment. Directly forward of this observation room will be the captain's and navigating officer's quarters, and the pilot house and bridge, and directly in front of the pilot house will be a large clear deck for passengers; a clear promenade will be arranged on this deck leading from in front of the pilot house clear around on each side and aft of midships of the boat. This will be covered over with awnings,

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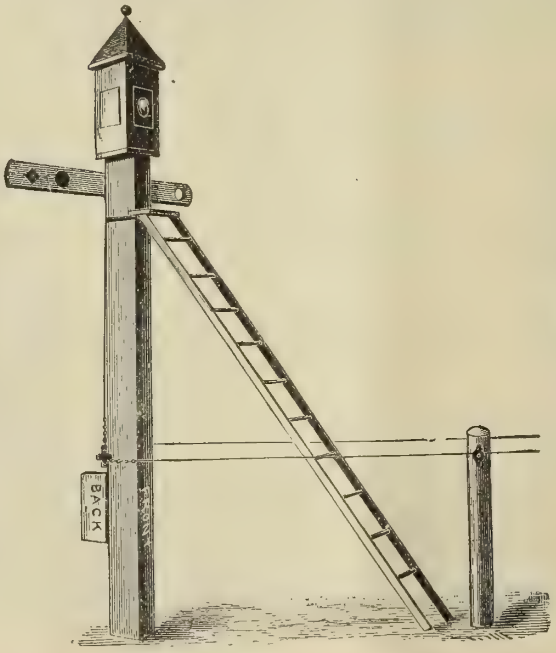

PIPER'S PATENT DISTANT SEMAPHORE

and will be a very desirable feature for the passengers' pleasure. The accommodations throughout will be finished handsomely in hardwood panelling, oak, mahogany, etc. Running hot and cold water will be connected to all staterooms, bathrooms and toilet rooms, and a central station system of call bells will be fitted and connected to all passengers' quarters and staterooms.

NORTHERN NAVIGATION CO.'S VESSEL NOW UNDER CONSTRUCTION.

Atlantic and Pacific Ocean Marine.

The Allan Line S.S. Hesperian arrived at Montreal, May 7, on her maiden trip from Great Britain.

Announcement has been made that the C.P.R. will continue for the present to make Quebec the summer terminus of its Atlantic service.

The C.P.R. steamship Mount Temple has been temporarily repaired at Halifax, so that she can proceed to the U.S. where permanent repairs will be undertaken.

The C.P.R. steamship Empress of Ireland sailed from St. John, N.B., May 1, being the last of the ocean-going vessels to leave the port for the winter season.

The Thomson Line s.s. Latona, which sailed from Montreal May 9, was run down by the s.s. Japanic in the English channel recently, and is considered, with her cargo, a total loss.

The C.P.R. steamship Empress of Britain, on her first trip on the St. Lawrence route this season, created a record in the number of passengers brought on one vessel, viz., 1,580.

The exports from St. John, N.B., during the winter were valued at $23,000,685, an increase of $3,500,000 over the previous year. Wheat shipments totalled 6,500,000 bush., and deal 20,500 standards.

Sir Thos. G. Shaughnessy, President C.P.R., when in London, Eng., in May, emphatically denied the recent report that the C.P.R. Pacific fleet was to be sold to the Peninsular and Oriental Steamship Co.

The C.P.R. steamship Empress of Britain in coming to her moorings in Quebec harbor, May 8, came into contact, on account of the strong gale and rough sea, with the G.T.R. tender Pilot, smashing the latter's top railing and bridge.

The Allan Line S.S. Corsican was the first ocean-going vessel to enter Montreal this season, arriving about 9 a.m., April 30. She was followed shortly after by the Dominion liner Dominion and the Thomson liner Fremona.

A. Piers, Manager C.P.R. steamship lines, is reported to be negotiating for the purchase of two vessels for the Pacific service, to replace the Lennox and Glenfarg, at present under a time charter. These two vessels were chartered to replace the Athenian and Tartar, which were sold to a Japanese company.

Capt. W. J. Farrel, of the British s.s. Silvia, has been exonerated from any blame in connection with the loss of that vessel on the Sow and Pigs shoal, Mar. 14. It has been decided that the accident was caused by an unknown set of the current and the fact that the whistle and bell on the shoal were not acting properly.

A Liverpool, Eng., despatch recently stated that the White Star Steamship Line will inaugurate a Great Britain-Canada service next year in conjunction with the existing Dominion Line service. The two boats under construction for the Dominion Line, named Alberta and Albany, will, it is said, be operated by the White Star Line and renamed Laurentic and Megantic, running alternately with the Dominion Line steamships Canada and Dominion.

The Thomson Steamship Line is reported to have purchased the S.S. Consuelo for its St. Lawrence-London trade, and it intends to have it renamed. The Consuelo was owned by T. Wilson, Sons & Co., Hull, Eng., and was built at Newcastle, Eng., in 1900. Her dimensions being: Length, 461.5 ft.; breadth, 52.1 ft.; depth, 31.1 ft.; tonnage, 6,025 gross, 3,960 register; with triple expansion engines, cylinders, 22, 37 and 64 ins. diameter, by 42 ins. stroke, and 783 n.h.p.

Sir Thos. G. Shaughnessy in an interview in London, Eng., recently on the "all red" route, said that the proposed Halifax-Blacksod Bay route was impossible, chiefly because of the necessary transhipment of passengers and goods. R. Ambrose, M.P., in response to this, stated that Sir Thomas has often been informed that it is intended to "take passengers direct from London to Blacksod Bay without transhipment." Mr. Ambrose does not say how this is to be performed.

The Dominion Line s.s. Ottawa, which sailed from Montreal May 9, collided with the Dominion Coal Co.'s s.s. Trold, in the Gulf, during a dense fog, May 11. The Ottawa, which was considerably damaged, returned at slow speed to Quebec, where she arrived May 13, while the Trold made for Gaspe Basin, where she was beached. A survey was held of the Ottawa, and it was decided to send her to Montreal to discharge cargo, after which she will return to Quebec for temporary repairs, prior to crossing the Atlantic for Great Britain, where permanent repairs will be undertaken. The Ottawa's passengers were transferred to the s.s. Kensington, which sailed May 16.

The C.P.R. steamship Milwaukee collided with the Government icebreaking steamer Montcalm, in the St. Lawrence River, May 7, after which the Montcalm, which was considerably damaged, headed for Quebec harbor, where she sank, and was subsequently refloated. The Milwaukee was apparently undamaged and proceeded to Montreal. An enquiry has been held into the causes of the accident by Commander O. G. V. Spain, whose judgment in the matter is given in another column. Replying to questions in the House of Commons, May 14, the Minister of Marine said: "That the contract price of the Montcalm was $265,233; the amount expended for repairs since her purchase to May 1 was $119,377.22. From 1904 to May 1 there had been expended for furnishings, $6,853.19. The total expense for the same period, including salaries of crew, clothing, provisions, etc., was $657,725.41.

Maritime Provinces and Newfoundland.

G. Watt has been appointed measuring surveyor of shipping at Chatham, N.B.

D. G. McKenzie has been appointed Harbor Master at Big Harbor, Cape Breton.

M. R. McInnis has been appointed Government wharfinger at Amaguadus Pond, Cape Breton.

The Halifax, N.S., steamboat Isaac N. Veasey, which was wrecked last year near North Sydney, has been raised and will be thoroughly overhauled.

The Eastern Steamship Co.'s receiver has been granted permission to issue certificates for $115,300 for expenses of operation, including $22,950 for St. John, N.B.

The British survey ship Ellinor is being utilized this summer on the northeast coast of Newfoundland. Capt. Coombe has recently been appointed in command.

Salvage operations are being continued on the wrecked s.s. Tolesby off the Newfoundland coast, but she is gradually breaking up. About 2,800 bales of cotton have been salved.

The Plant Line s.s. A. W. Perry, bound from Boston to Halifax and Charlottetown, struck on McMillan's Point, near Port Hawkesbury, N.S., May 19, and it is feared will be a total loss.

G. E. Bentley, Port Greville, N.S., launched a schooner recently, named Irma Bentley. Her dimensions are: Length, 151.5 ft.; breadth, 35.5 ft.; depth, 12.4 ft.; tonnage, 414 register.

The Kennebecasis Steamship Co.'s steamer Hampton opened navigation on the Kennebecasis River April 22, which is about 10 days earlier than it was possible to do in 1907, on account of ice.

The May Queen Steamship Co.'s steamboat May Queen, which has been equipped with new machinery, and additional staterooms, was placed on her route between St. John, N.B., and Chipman, May 13.

J. Whelan, Carbonear, Nfld., and N. Gosse, Spaniard's Bay, Nfld., have been appointed Surveyor of passenger accommodation on board steam and sailing vessels, and Surveyor of lumber, respectively, for those ports.

The s.s. Bridgewater has been fitted up as a wrecking vessel, and is engaged in salvage operations on the Donaldson Line s.s. Kildona, which was recently wrecked off Cape Sable. Capt. Landry is in charge of the work.

The Montreal Transportation Co.'s s.s. Stormount was at Sydney, N.S., recently, for the first cargo of rails this season, from the Dominion Iron and Steel Co., and loaded part for Quebec and the remainder for Port Arthur.

The Kilkeel Co.'s s.s. Kilkeel was damaged in collision with the Dominion Government ferry steamer Scotia at Port Mulgrave, N.S., May 6, and after unloading her cargo of coal, steamed to Halifax, where the necessary repairs were effected.

The St John, N.B., City Council, May 4, adopted a resolution to the effect that a new harbor improvement committee be appointed, and that steps be taken to use the dredges at present working in the port, in a comprehensive scheme of harbor improvement.

An order-in-council has been passed ordering that sec. 3 of the regulations respecting the Canadian coasting trade, dated April 17, 1883, be amended by providing that licenses taken out for a year or part of a year shall always terminate on Mar. 31, instead of on June 30.

The contract for the icebreaking steamship for New Brunswick-Prince Edward Island winter service has been awarded by the Dominion Marine Department to Vickers Sons and Maxim Ltd., London, Eng. The con-

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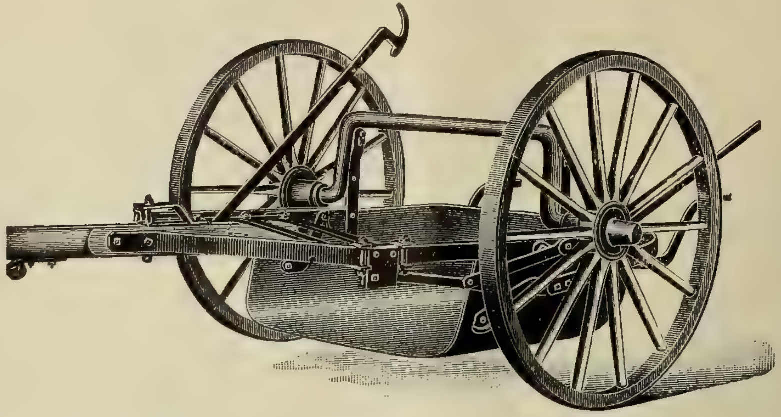

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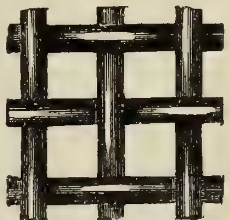

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tract price is £103,000, and delivery is to take place within ten months of the signing.

The C.P.R. is reported to be in negotiation for the purchase of the Maine Coast Transportation Co.'s business. This company owns the steamships Massasoit and Mohawk, vessels of the lake type, and maintains a service between Boston, Mass., and Machias, Me., calling at Eastport, Lubec and other ports en route.

The steamboat Sincennes, recently purchased from the Sincennes-McNaughton Co., by D. J. Purdy, St. John, N.B., for the St. John River route, made a trial trip recently, conveying a number of invited guests up the river. She has been thoroughly overhauled, and will be operated by the Crystal Steamship Co.

G. A. Morris, of Advocate, N.S., has sold the schooner Emily to a Five Islands syndicate, for use in the packet service between Five Islands and St. John, N.B. The Emily was built at Spencer's Island, N.S., in 1902, her dimensions being: Length, 64.6 ft.; breadth, 23.1 ft.; depth, 6.5 ft.; tonnage, 59 register.

The steamboat Harland, which was launched from J. McGill's yard at Shelburne, N.S., May 2, is being built for the Island Steamship Co., Charlottetown, P.E.I., for freight and passenger traffic on the river. Her principal dimensions are: Length, 120 ft.; breadth, 27 ft., and a draft of 6½ ft. She will be fitted with twin screws.

The Lewiston Shipping Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $7,000 and office at Lewiston, N.S., to carry on a general shipping business; to own and operate steam and sailing vessels, wharves, docks, etc. The provisional directors are: G. E. M. Lewis, B. J. Lewis, G. E. Lewis, F. L. Lewis, Truro, N.S., and J. Lewis, Brownville, Me.

The Halifax, N.S., barque Strathern, which sailed from St. John, N.B., Dec. 17, for the West Indies, and which was subsequently wrecked and refloated, and was being brought back to Halifax, was reported, May 5, to have been abandoned at sea, and set on fire. She was built at Maitland, N.S., in 1893, her dimensions being: Length, 212.8 ft.; breadth, 38.8 ft.; depth, 23.5 ft.; tonnage, 1,272 registered.

The Magdalen Islands Steamship Co. is offering for sale its new passenger and freight screw steamship Lady Sybil. Her dimensions are: Length, 165 ft.; breadth, 28 ft.; depth, 12¼ ft. She is fitted with triple expansion engines, with cylinders 16, 26½ and 43 ins. diam., by 30 ins. stroke, with a speed of 12 knots, and capacity of 500 tons deadweight. There is accommodation for 54 passengers.

The Dominion Department of Marine has under consideration, tenders for dredging at the following places in N.S.: Digby, Cheticamp, Fawson's Cove, Fourchu, Lunenburg, Liverpool, L'Archveque, Mabou, Musquodoboit, McKinnon's Harbor, Mahone Bay, North Sydney, Port Hawkesbury, Petpeswick, Red Islands, Ship Harbor, South Ingonish, Sheet Harbor, Three Islands, Yarmouth, Weymouth and Windsor.

Cushings Ltd. has been incorporated under the New Brunswick Companies Act, with a capital of $350,000, and head office at Lancaster, N.B., to carry on a lumbering business; to construct, purchase or otherwise acquire and operate steam and other vessels, and to carry on the business of carriers by land and water. The provisional directors are: T. Cushing, R. K. Jones, A. Wilson, G. S. Cushing, St. John, N.B.; and W. C. Cushing, Pittsburg, Pa.

The Newfoundland Marine Department issues a notice to mariners to the effect that a square wooden tower, 24 ft. high, has been erected on Salmon Cove point, from which a white occulting light with alternate periods of 7 seconds light and 3 seconds dark will be shown during the period of open navigation. The light is dioptric of the sixth order, elevated 104 ft. above sea level, and should be visible in clear weather 10 miles seaward in all directions.

The St. John River Steamship Co., Ltd., has been incorporated under the New Brunswick Companies Act, with a capital of $48,000 and head office at St. John, to build, purchase or otherwise acquire, and to operate steam and other vessels on the St. John River and branches and elsewhere; to carry passengers and merchandise, and to act generally as common carriers. The provisional directors are: L. A. Curry, R. K. Jones, G. R. Vincent, E. J. Jones and S. J. Vincent, all of St. John, N.B.

A bill respecting signal dues at Halifax, N.S., is under consideration at the current session of the Dominion Parliament. The object of the bill is to permit vessels having a tonnage of less than 150 tons to come into Halifax harbor without paying signal dues. There is a signal station in the harbor, but only vessels of over 150 tons are signalled, and the Government, in introducing the legislation, desired to exempt such vessels as were not compelled to signal from the payment of the dues.

The s.s. Norwood, bound from Glasgow, Scotland, to Sydney, N.S., with a general cargo, and under a time charter to the Dominion Coal Co., was badly damaged by icebergs off Newfoundland recently, and abandoned in a sinking condition near Miquelon. An enquiry into the causes of the loss has been held at St. John's, Newfoundland. She was built at West Hartlepool, Eng., in 1888, her dimensions being: Length, 290 ft.; breadth, 38.2 ft.; depth, 20.3 ft., with triple expansion engines, cylinders 22½, 36½ and 60 ins. diam., by 39 ins. stroke; tonnage, 2,297 registered.

The Maritime Contracting and Commercial Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $20,000 and office at North Head, N.B., to carry on the business of contractors, and to build, purchase, or otherwise acquire and operate vessels of every description, for the conveyance of passengers, mails and merchandise, and to carry on the business of carriers by land and water, warehousemen, wharfingers and forwarding agents; the provisional directors are: E. R. Reid, A. M. Reid, A. D. Reid, J. D. Gaskill, L. J. LeBlanc, North Head, N.B.

Replying to A. A. McLean, P.E.I., in the House of Commons, May 4, on a question of delay caused to shipping at the maritime ports, owing to the priority accorded to steam vessels in the matter of loading coal, the Minister of Marine said, that if the piers at which the sailing vessels had been delayed were Government piers, some regulations might be adopted to meet the situation complained of; but all the piers at which there had been such delays belonged to the coal owners, and were private properties. The suggestion that the Government should by legislation compel the colliery owners to regulate their methods of doing business raised a serious question. The matter was one of civil rights and should be dealt with by the provincial legislatures. He had been told by the coal-owners that the grievance was incidental to the exceptional circumstances of last year, and was not likely to recur.

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W. McDonald has been appointed measuring surveyor of shipping for the port of Souris, P.E.I.

The firm of Henry Fry & Co., steamship agents, etc., Quebec, has been dissolved, R. Stanley retiring. The business will be carried on in future by E. C. Fry, under the old firm name.

Province of Quebec Marine.

T. Beland, Quebec, has been appointed agent of the Marine Department for that city in succession to J. U. Gregory, resigned.

The name of the tug D. S. Walker, official number 116,543, registered at Montreal, has been changed by order-in-council to that of Emma L.

The Montreal Transportation Co.'s tug Bartlett, built on the Clyde, Scotland, has been given her trial run and was expected to arrive at Montreal at the end of May.

At the Montreal Sailors' Institute's annual meeting, May 12, among the subscriptions to the building fund acknowledged were: H. and A. Allan, $500, and H. A. Allan, $250.

G. W. Stephens, Chairman of the Montreal Harbor Commissioners, who has represented the St. Lawrence division of Montreal in the Quebec Legislature for three years, has announced his withdrawal from political life.

J. W. Hayes, of the Bristol, Eng., Dock and Harbor Commission, who has been on a visit to Canada, inspected the Montreal Harbor Works and other industrial centres, before leaving for home by the Empress of Britain, May 15.

G. W. Stephens, Chairman of the Montreal Harbor Commission, on his recent return from Europe, presented various members of the staff with watches in recognition of their faithful services during his absence.

At the annual meeting of the Quebec and Levis Ferry Co., held May 19, the following officers and directors were elected for the current year: President, D. C. Thomson; Vice-President, C. H. Shaw; other directors, S. H. Dunn, A. Gourdeau, G. E. Allen Jones, H. B. Patton, and J. S. Thom.

The Quebec schooner Blanche Alma, owned by J. Simard, was reported ashore near Berthier, Que., in a bad position, recently. It was not expected that she would be saved. She was built at Ste. Anne, Que., in 1890, her dimensions being: Length, 78.2 ft.; breadth, 22.8 ft.; depth, 8.3 ft.; 87 tons register.

The Minister of Marine has approved of the amendment to the Quebec Harbor Commission's by-law regulating how sea-going vessels shall enter or leave the wet dock, Louise docks. The present regulation is repealed and the following substituted: "No vessel shall enter or leave the wet dock, Louise docks, without the assistance of a tow boat."

The construction of the steel sheds on the Montreal wharves is already well in hand. Shed 11, occupying the width between the King Edward and Jacques Cartier piers, is well on the way. It is anticipated that all construction will be completed before the close of navigation, and that everything will be in readiness for the opening of the 1909 season.

The s.s. Henry R. James, recently purchased from the Rutland Transit Co., Ogdensburg, N.Y., by the Quebec and Levis Ferry Co., arrived at Levis May 7. After being overhauled and some alterations made, she will be placed on the ferry route between Quebec and Levis, and utilized chiefly for conveying railway cars between these points. She was built at Detroit, Mich., in 1890, her dimensions being: Length, 240 ft.; breadth, 42 ft.; depth, 23.4 ft.; tonnage, 2,048 gross, 1,552 net.

The Buckingham Rapid Transit Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $20,000, and office at Buckingham, Que., to carry on the business of transporting goods and passengers on the roads, rivers, lakes and waters of Canada and elsewhere; to build, purchase and otherwise acquire and operate stage and automobile lines, ferries, hotels, warehouses, etc., and to own and operate vessels of every description, and the necessary wharves, docks, and other facilities for the accommodation of passengers and freight. The provisional directors are: A O. Anderson, J. F. Higginson, W. A. MacCallum, J. Macdonald, D. Robertson, all of Buckingham, Que.

G. W. Stephens, Chairman of the Montreal Harbor Commission, returned to Montreal, May 3, after a trip round the chief European ports, extending over four months, in company with F. W. Cowie, Chief Engineer. The object of the trip was mainly to note the methods adopted in the various chief harbors of Europe, in handling freight and in dealing with shipping generally, with a view to the utilization of the same or similar methods in Montreal harbor. A report has been submitted to the Marine Department embodying the view that a 40 ft. channel from the ocean is a necessity for the future well-being of the port. It may be mentioned in this connection that the Mersey Dock and Harbor Board, Liverpool, Eng., has under consideration plans for the dredging of a 40 ft. channel up the Mersey to Liverpool.

In reply to questions raised in the Senate May 7, respecting Government aid to shipbuilding, Sir Richard Cartwright said the question deserved and would receive the attention of the Government. However, it was not one that would be rashly undertaken, but that the Government would have to be persuaded the benefits hoped for would follow, and that to bonus trade would establish a successful industry. The disadvantage of Canadian shipbuilders in having to pay duties on the parts they now brought into Canada for building ships constituted something which, in his opinion, might well be dealt with, though he did not want to be understood that he pledged the Government on this point.

CANADIAN PACIFIC RAILWAY COMPANY.

ISSUE OF $24,336,000.00 ORDINARY CAPITAL STOCK.

SPECIAL INTEREST PAYMENT.

As intimated in President's Circular to the Shareholders, dated January 14th, 1908, an Interest Payment of 1¼%, or 75 cents per share, will be paid on October 1st, 1908, on the first three instalments (sixty dollars) per share, on the shares of the above new issue represented by the Certificates of Subscription, to holders of record at 3 o'clock p.m., on June 19th, 1908, who have paid these instalments on or before their respective due dates, and it is hereby notified that this Interest Payment will be mailed from New York, to the registered addresses of holders, on September 30th, 1908.

W. R. BAKER.
Secretary.

Montreal, 28th May, 1908.

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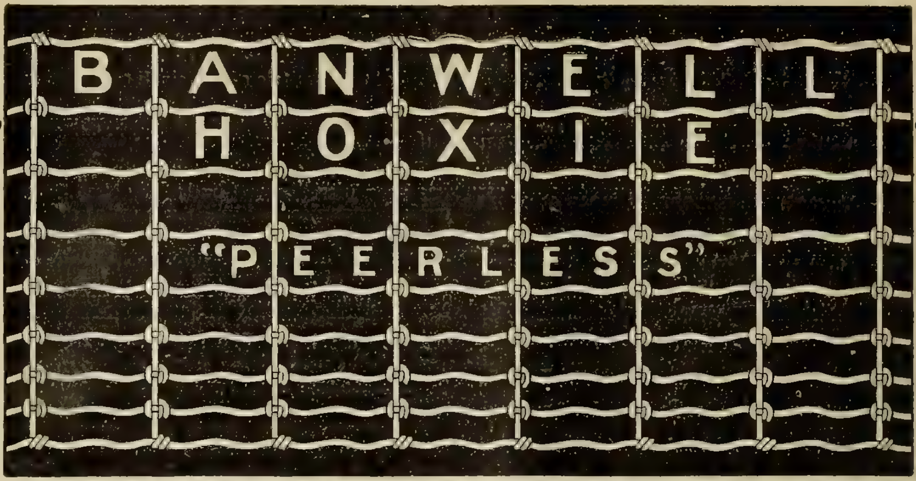

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THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00 " "
Map No. 5—South-Western Alberta	8.00 to 15.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00 to 25.00 per acre.

All prices are subject to change without notice.

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160 Acres	at	$ 8.00	per acre,	cash payment	$191.70	first	year's	interest	$65.28	and nine	instalments of	$160.00
"	"	9.00	"	"	215.70	"	"	"	73.46	"	"	180.00
"	"	10.00	"	"	239.70	"	"	"	81.62	"	"	200.00
"	"	11.00	"	"	263.60	"	"	"	89.78	"	"	220.00
"	"	12.00	"	"	287.60	"	"	"	97.96	"	"	240.00
"	"	13.00	"	"	311.55	"	"	"	106.10	"	"	260.00
"	"	14.00	"	"	335.60	"	"	"	114.32	"	"	280.00
	"	15.00	"	"	359.50	"	"	"	122 44	"	"	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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F. T. GRIFFIN, Land Commissioner, Winnipeg.

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Ontario and the Great Lakes.

D. McKay has been appointed Harbor Master at Goderich, Ont.

The Niagara Navigation Co.'s steamer Corona opened the Niagara river route May 11.

J. Bassingthwaighte has been appointed measuring surveyor of shipping for Sault Ste. Marie, Ont.

The Algoma Central Steamship Co., we are advised, has sold its steamboat Ossifrage to T. J. Stockwell, Amherstburg.

J. Nicholson and W. H. McGauley have been appointed Dominion Government wharfingers at Summerstown and Blind River, respectively.

The wreck of Haney and Miller's barge Resolute has been removed from the dangerous position it occupied in the western entrance to Toronto harbor.

The Turbine Steamship Co.'s steamship Turbinia has been fitted with new propellers, and made her first trip of the season on the Toronto-Hamilton route May 23, creating a speed record.

The St. Lawrence and Chicago Steam Navigation Co.'s lake steamboat E. B. Osler was, it was expected, to undertake her maiden trip at the end of May.

The Canadian Pacific Car and Passenger Transfer Co.'s car ferry Charles Lyon, a press report states, is to be altered, a 70-ft. apron replacing the present 30-ft. one.

The Lake Ontario and Bay of Quinte Navigation Co.'s steamboat North King will run this summer direct to Charlotte, in connection with the New York Central Rd.

It is announced that the U.S. revenue cutter Dallas, which was assigned to the St. Lawrence and Lake Ontario district, has been retired, and will not be placed in commission again.

The Reid Wrecking Co.'s steamboat Fred. Pabst, which was sunk in a collision at the Lake Huron entrance last fall, is to be rebuilt. The contract has been awarded to a Detroit firm.

The Spanish River Navigation Co. has chartered the St. Lawrence River Steamboat Co.'s steamboat Jessie Bain for the season, to run between Manitoulin Island and the north shore.

The Montreal and Cornwall Navigation Co.'s steamboat Filgate has been overhauled and improved during the winter, and was placed on her route between Montreal and Cornwall May 7.

The Toronto Island ferry service was opened May 9, when the new landing stage was used for the first time. The company's new ferry Woodbine was placed on the route May 26.

Detroit vessel owners have agreed to continue their former agreement, to put their boats into commission on June 1. They hold that to do so earlier in the season, when insufficient cargoes are offering, tends to lower rates.

The Winona Steamship Co., operating the s.s. Winona, should have been included in the list of companies managed by R.O. and A. B. Mackay, Hamilton, Ont., merged under the name of the Inland Navigation Co., Ltd., but it was omitted from the particulars furnished us.

The Oswego steambarge Monteagle collided with the Air Line railway bridge across the Welland Canal, May 18, sustaining considerable damage to her deck and boiler houses. On May 21, during a fog, she ran ashore near Oakville, Ont., but was subsequently floated without damage.

A boiler explosion on board the Richelieu and Ontario Navigation Co's. steamboat Brockville in Toronto harbor, May 9, caused the death of two men, and injury to three others. At the inquest, the jury stated that the explosion was caused by the interference of some person with the valves.

Capt. A. McNabb, Owen Sound, has been appointed to the command of the Dominion Government survey steamer Bayfield, vice Capt. W. Zealand, resigned. The Bayfield has been recently overhauled, and it is said will be engaged in the vicinity of the Canadian Northern Ry.'s port at Key Harbor.

The Canadian Lakes Transportation Co.'s package freight steamship Tagona, which has been built at Dumbarton, Scotland, is now on the way across the Atlantic, with a cargo of whiskey for various points. On arrival on the lakes, she will be placed on the Port Arthur-Montreal route, with the Kenora and Regina of the same company's fleet, of which she is a sister ship.

The Bay of Quinte and Lake Ontario Navigation Co. recently issued notice to the effect that in view of the extremely high water this spring, and the consequent flooding of the low wharves, it would guarantee safe landing only at Kingston, Picton, Deseronto and Belleville, and would not be liable for any damage sustained in landing of passengers, freight or cattle at other places along the Bay of Quinte.

The steamboat Argyle, owned by the Lake Ontario Navigation Co., Ltd., in liquidation, was offered for sale recently in Toronto; but the bids made were considered too low, and the sale was postponed. She was built at Picton, Ont., in 1899, her dimensions being: Length, 185.1 ft.; breadth, 26 ft.; depth, 9.7 ft.; tonnage, 700 gross, 374 net. She is driven by a paddle wheel, with engine of 274 n.h.p.

The annual returns of the lockmasters on the minor inland waterways subject to the control of the province of Ontario, shows that the lockages during the season of navigation of 1907 were as follows:

	Steamers.	Small Boats.	Scows and Rafts.
Port Carling..........	3,927	936	930
Mary's and Fairy Lake locks...............	423	133	209
Magnetawan..........	1,045	100	444
Total..............	5,395	1,169	1,583

A press report states that a company is being formed under the name of the Peterboro, Midland and Trenton Transportation Co., Ltd., with office at Peterborough, for the purpose of building two stern-wheel steamboats, to start a line of similar vessels on the canals, rivers and lakes in the vicinity for passengers and freight. It is also stated that the vessels which the company proposes to build will have accommodation for 1,000 passengers, and will have berth accommodation, dining-rooms, etc., for 200; and in speed are to average 16 to 18 miles an hour. Capt. Clark, Peterborough, and formerly engaged in the Pacific coast service, is named in connection with the project.

The Dominion Parliament at its current session has under consideration a bill respecting the Meaford harbor, Ont. Its object is to legalize a situation which has existed for some years, and has created some disturbance. The township of St. Vincent was the first authority which had power to deal with the harbor, but in 1874 Meaford was incorporated as a town, the harbor being within its territorial limits. The municipal authority, assuming that it had authority to deal with the harbor, made necessary improvements and levied taxes. As some doubt had been raised as to the action of the town council, the Marine Department was appealed to, and it was decided to ask Parliament to legalize what had been done, and to declare that for the future the harbor shall be vested in the town of Meaford.

The U.S. Lake Survey quotes the lake levels, in feet above tidewater, for April, as follows: Superior, 601.68; Michigan and Huron, 580.82; Erie, 573.22; Ontario, 248.02. Since March, Superior has fallen one inch, Michigan and Huron have risen 2¾ ins., Erie, 6¾ ins., and Ontario 7½ ins. Superior is 4 ins. lower, Michigan and Huron 5¾ ins. higher, Erie 11½ ins. higher, and Ontario 23 ins. higher than the average April stage of the past 10 years. Lake Ontario will probably continue to rise until July, when it will be about 4 ins. higher than in April, after which it will recede, reaching the April level in Sept. The high water in Lake Ontario is caused by ice in the St. Lawrence checking the outflow, to the excessive precipitation in the Ontario basin, to the large flow from the Niagara River due to the high level of Lake Erie, and to the closing of one of the outlets of the lake at the Galops Rapids by the Gut Dam, which if it were not in place would reduce the level in the lake by about 6 ins.

The Ontario Department of Public Works has charge of the duty of maintaining and improving the navigation on a number of minor inland waters. During 1907, considerable dredging was done in the Indian River below the rocks at Port Carling, at a cost of $1,954.35; and the improvement of Kemp's channel is being gone on with this season. This portion of the channel being improved lies between Bala Park and Acton Island, and the plans for the work in progress provide for the dredging of a steamboat channel 60 ft. wide, to a depth of 6 in. below the level of the lower mitre sill at Port Carling lock. It is hoped to have the channel completed this season. A special appropriation was taken in 1907 for this work, and $2,775.65 has been expended. Wharf improvements were effected at Port Carling during 1907, at a cost of $2,000. The Port Carling lock has been improved at a cost of $537.68; the swing bridge and canal at Port Sandfield repaired at a cost of $837.54; the clearing of the steamboat channel at Magnetawan, and other work there cost $1,794.18, and general repairs were given to the Mary's and Fairy Lakes works.

◆

Shipping Companies' Bills of Lading.—After considerable discussion, and a series of conferences with representatives of the various steamship companies and the Dominion Marine Association, the Banking and Commerce Committee of the Senate decided, May 14, to report the bill amending the act respecting the carriage of goods by water, with certain amendments. The principle whereby a steamship company cannot by the terms of its bill of lading, contract itself out of liability for damage to or shortage of goods in transit, is retained. Amendments have been inserted whereby it is provided that steamship companies shall not be held liable for damage to goods by strikes or other causes beyond their control; and that owners of steamships cannot be indicted on a criminal count for a violation of the act; and a new provision is inserted protecting the companies from misrepresentations by shippers as to character and value of consignments; and the clauses providing that steamship companies must defend suits for damages at the point of origin of the consignments, is amended, so that suits must be brought at the Canadian port of shipment or on the other side at the port of arrival

The Lakeside Pleasure Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $20,000 and office at St. Thomas, to acquire and operate steam and other vessels, in connection with places of amusement. The provisional directors are: A. J. Green, E. O. Penwarden, F. W. Cowley, H. Boughner, A. V. Thayer, St.Thomas, Ont.

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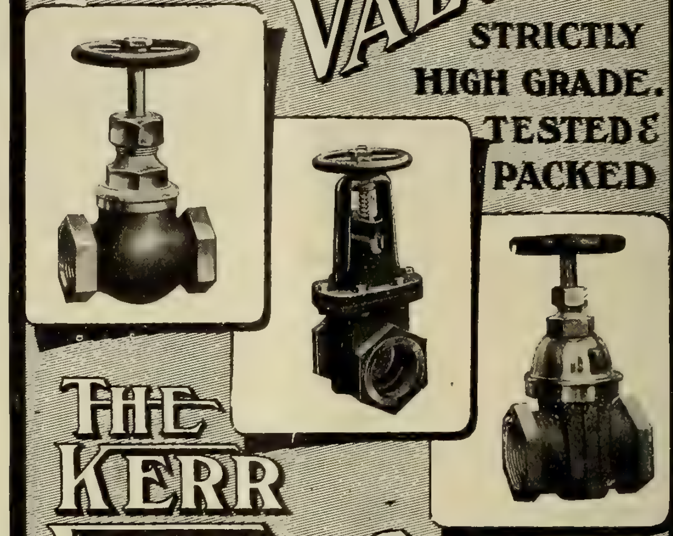

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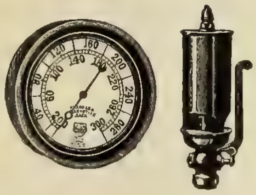

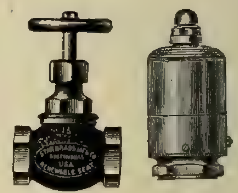

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Simplest and Best
Both Made by
Standard Coupler Co.
2 RECTOR STREET NEW YORK
Standard Steel
Platforms
Used by all Canadian Railways

Manitoba, Saskatchewan, Alberta, Etc.

The Dominion Public Works Department is asking for tenders for the construction of a movable dam and other appliances for the St. Andrew's Rapids works near Winnipeg.

The Western Stone Co., Ltd., Winnipeg, capital $40,000; and the Union Lumber Co., Ltd., Winnipeg, capital $10,000,000, have been incorporated under the Manitoba Companies Act, with power, among other things, to build, purchase or otherwise acquire and operate steam and other vessels in connection with their businesses.

The Winnipeg Navigation Co. has purchased the steamboat Alberta, said to be the largest steam vessel on inland waters between the Great Lakes and the Rockies. The Canadian register shows the Alberta as owned in Prince Albert, Sask., where she was built in 1904. She is a paddle steamer of 15 h.p., and her dimensions are: length, 130 ft.; breadth, 31 ft.; depth, 4 ft.; tonnage, 315 gross, 214 register.

B.C. and Pacific Coast Marine.

The British steamship Agapanthus was laid up recently at the Esquimalt dry dock for repairs.

It was stated recently that the Dominion Government will spend $2,000,000 on harbor and dock improvements at New Westminster.

The C.P.R. steamship Otter broke her shaft off the Vancouver coast, May 7, and was towed into port May 8, by the C.P.R. steamship Tees.

F. M. Richardson has resigned the position of inspector of boilers and machinery at Vancouver, to engage in private practice as a consulting marine engineer.

Capt. Alex. McLean has been engaged by Foley, Welch and Stewart, to run cargoes of blasting powder from Prince Rupert, up the Skeena River, for G.T. Pacific Ry. construction work.

J. Robertson, brother of Capt. Robertson of the C.P.R. steamship Princess May, was washed overboard and drowned from the Empress of India on the voyage from Yokohama to Victoria recently.

The R. A. Alley Steamship Line, which operates a line of vessels between Vancouver, Victoria and New Zealand, will be continued under the same name, and under the direct charge of Mrs. R. A. Alley. Mr. Alley died recently.

The Union Steamship Co.'s s.s. Cariboo, built at Troon, Scotland, is on her way to Vancouver to take up service on the coast. A press report states that the company is negotiating for the purchase of a British coasting steamer for use on the B.C. coast.

J. H. Greer, Victoria, has taken over the management of the tug Achates, recently built at Vancouver. Her dimensions are: Length, 115 ft.; breadth, 23 ft.; depth, moulded, 13½ ft., and her engines have cylinders 16 and 32 ins. diam. by 20 ins. stroke.

The William C. W. Renny Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $10,000, to conduct a general stevedoring, shipping, and marine insurance business, and to act as agents for shipowners, etc., in the province.

G. A. Keefer, Dominion Government resident engineer at New Westminster, announced recently that it was intended to supply another dredge for harbor work on the coast. The Government had, however, not decided whether to build a dredge in Canada, or to buy one which was at present on sale in Germany.

The C.P.R. tug Nanoose was launched at Victoria recently. Her dimensions are: Length, 129 ft.; breadth, 24½ ft.; depth, 15 ft.; tonnage, 600 register. She will, it is understood, be used to tow the car ferry barge between the station at Nanoose Bay and the ferry slip at Vancouver, thus connecting the Esquimalt and Nanaimo Ry. with the C.P.R.

Capt. J. W. Troup, Superintendent of the C.P.R. B.C. coast steamship service, arrived in Montreal from Great Britain, May 9. During his visit there he completed the arrangements for the construction of the Princess Charlotte, which he stated would soon be ready for launching, and would probably reach Victoria in Jan., 1909.

A deputation of residents at Metchosin waited on representatives of the Provincial Government recently with a view to enlisting aid in the construction of a wharf for the accommodation of a ferry which it is proposed to establish across Esquimalt harbor, connecting with Victoria. It is intended to run a ferry, at the commencement, for passengers only.

The Western Rivers Improvement Co. was the title of a company for which an act of incorporation was being asked at the current session of the Dominion Parliament. The company desired to have power to effect improvements in the navigation of the Thompson River and tributary waters in B.C. The promoters withdrew the bill after it had passed some of the earlier stages.

The G.T. Pacific Ry. is reported to be about to order a steamboat at Portland, Wash., for use on the Skeena River this summer. A vessel was launched at Victoria, April 15, for the G.T. Pacific Ry.'s Skeena River service, and described in our May issue. We have been advised that the G.T. Pacific Ry., is not negotiating for the construction of a vessel at Portland, nor is there any present intention of doing so.

The Mackenzie Steamship Co. has chartered the British steamship Braemont for a five months' service between B.C. and Alaska ports. The Braemont, formerly Corby Castle, was built at Sunderland, Eng., in 1898, her dimensions being: Length, 350 ft.; breadth, 46.2 ft.; depth, 25.6 ft.; tonnage, 3,607 register, with triple expansion engines, cylinders 23½, 40 and 66 ins. diam., by 45 ins. stroke, and 327 n.h.p.

The Vancouver and Victoria Stevedoring Co. has amalgamated with McCabe and Hamilton, and the Washington Stevedoring Co., of Seattle, Wash., for the avowed purpose of reducing the expense of management, and reducing rates where possible. The capital of the combine is $600,000. The officers of the new company are: President, G. H. Walker, Seattle, Wash.; Vice-President, A. McDermott, Victoria; Sec.-Treas., J. S. Gibson, Seattle, Wash.

Foley, Welch and Stewart, contractors for a portion of the G.T. Pacific Ry., have purchased the steamboat Caledonia, to be utilized in connection with construction work. The Caledonia, which was formerly owned by the Hudson Bay Co., and latterly by the Caledonia Trading Co., was built at New Westminster in 1898, her dimensions being: Length, 142.4 ft.; breadth, 30.4 ft.; depth, 4 ft.; tonnage, 569 gross, 359 register. She is a stern-wheeled vessel, with engine of 17 n.h.p.

Judgment was given recently in the appeal of the plaintiffs in the case of Bryce and others vs. the C.P.R., for damages arising out of the collision between the C.P.R. steamship Princess Victoria and the steam tug Chehalis, July 21, 1906; the decision of the lower court being reversed and $26,500 damages being awarded, less $4,000 claim not appealed, and $2,000 conditional on the Admiralty Court's ruling. It is stated that the C.P.R. has given notice of appeal to the judicial committee of the Privy Council.

The Steamship J. A. McKee.

The Western Steamship Co., Toronto, is having a lake steamship built on the Tyne, and it was hoped to have had her in service in May. Capt. W. J. Bassett, Collingwood, who went to England to bring her over, has recently returned home, having abandoned hope that she can be completed in time to take up any route this season, on account of the shipbuilding trades disputes in Great Britain. The vessel, which is to be named J. A. McKee, after the President of the company, is being built to the highest classification of the British corporation, and according to Board of Trade measurements, and is designed to carry 3,150 tons dead weight on 18½ ft. mean draught in salt water. The chief dimensions are: Length, between perpendiculars, 248 ft.; breadth, extreme, 43 ft.; depth, moulded, 25 ft.; forecastle, 42 ft. The officers' quarters are forward, the captain's cabin being on the forecastle, those for the other officers being below, in addition to two spare cabins. The chief engineer's and steward's cabins are aft on the upper deck, and the general crew are also located aft, on the upper and main decks. The boat is to have 7 cargo hatchways, each 8 by 29 ft., large grain bin, 14 by 34 ft. by 7½ ft. high. The machinery comprises duplicate triple-expansion engines, with cylinders 20½, 33 and 54 ins. diam., by 36 in. stroke, with direct-acting reversing gear, and supplied with steam by two boilers of the cylindrical multi-tubular type, 10 ft. 6 ins. long by 13 ft. 6 ins. diam., at a pressure of 180 lbs. There are also 3 steam winches, and 3 derricks, designed and placed for the expeditious handling of cargo; and a complete electric light installation and steam heating equipment.

Marine Department Appointments.—The announcement of the promotion of Capt. C. E. Kingsmill, R.N., to the rank of Rear-Admiral, as foreshadowed in our May issue, is made in a recent issue of the London, Eng., Gazette. Rear-Admiral Kingsmill has also been appointed to the command of the Canadian marine service, which he takes over June 1. This command has hitherto been vested in Commander O. G. V. Spain, R.N., who was also Wreck and Pilotage Commissioner. The two positions have now been divided, and Commander Spain will devote himself entirely to the duties of the latter office, which have increased considerably in recent years. The appointment of Rear-Admiral Kingsmill presages a broadening and presumably an enlarging of the Canadian marine service, and a steady development of a marine militia. His salary is to be $3 000 a year.

Lake and Rail Rates.—In the case of Wyman, Partridge and Co. against the Boston and Maine Rd. and other companies, including the G.T.R., the Minneapolis, St. Paul and Sault Ste. Marie Ry., and the Canada Atlantic Transit Co., the Interstate Commerce Commission has decided as follows: Unless a railway forming a part of a lake-and-rail route sees fit to hold itself responsible for losses arising from perils of the sea, it should tender to the public a transportation contract which leaves shippers free to arrange for their own marine insurance. The defendants advanced their through rates from eastern points to Chicago and Minneapolis 3c. per 100 lbs. on first class and 1½c. on rule 25, etc., and these new rates included the cost of marine insurance. The bill of lading issued did not show definitely the rights of the shippers thereunder. The advanced rates are unreasonable and should be reduced unless the carriers issue bills of lading making them responsible for loss by perils of the sea.

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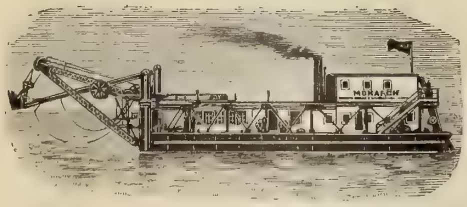

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SUBMARINE SIGNALS

Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says:

"Nearly all my sea life I have been looking forward to getting the assistance of a reliable sound signal. Now I feel that we have got it, and all that is required, in my opinion, is its universal application."

Full Particulars on Application to the

Submarine Signal COMPANY

BOSTON, MASS.

Montcalm-Milwaukee Collision Judgment.

Commander Spain, R.N., Dominion Wreck Commissioner, has given the following decision, which is concurred in by Capt. A. Reid, Port Warden of Montreal, and Capt. W. Fraser, of the Donaldson Co.'s s.s. Salacia, who sat with him as assessors to investigate the collision which occurred in Quebec Harbor, May 7, between the Dominion Government s.s. Montcalm and the Canadian Pacific Ry.'s s.s. Milwaukee:

"From the evidence adduced the s.s. Milwaukee, E. Griffiths, master, from London and Antwerp, with a large general cargo, arrived off the Port of Quebec on the night in question. All went well up to that time, and as is usual with all ocean steamships, she slowed down and stopped her engines off the ferry wharf to exchange the sea pilot for the river pilot, manœuvring the engines so as to keep the vessel in position, and to counteract the effects of the flood tide. While in this position, the officers in charge observed a steamer, which they afterwards ascertained to be the Government s.s. Montcalm, coming up rapidly on their port quarter, her green and masthead lights plainly visible. At this time L. E. Bouille, the river pilot, arrived on the bridge of the Milwaukee; the engines of this ship were immediately put full speed ahead (the vessel having lost steerage way, though at no time was she stationary) to proceed on her usual course up the river. The evidence shows that at this time, the green light of the Montcalm was still abaft the Milwaukee's port beam, but she was rapidly overtaking the Milwaukee and passed her till the green light on the Montcalm became obscured from the Milwaukee. The obscuration of this green light was for a very short period, when it came into view again. Immediately this green light was sighted for the second time, the evidence of the master and officers of the Milwaukee goes to show that one prolonged blast of their whistle was given to attract the attention of the Montcalm, and to advise them of their close proximity. This whistle, according to the evidence of the crew of the Montcalm, was not heard on board that ship, but the court considers that it was undoubtedly sounded. The Milwaukee immediately afterwards blew three blasts of the whistle, the orders to stop and go full speed astern being given simultaneously. These orders, by the evidence of the ship's official logs, were carried out immediately, but being a single-screw vessel, the effect was not as prompt or effective as it would have been on a twin-screw vessel, so that almost immediately the vessels came into collision with the resultant damage. Fortunately no lives were lost or any personal injury sustained.

"The Canadian Government twin-screw s.s. Montcalm, S. Belanger, commander, bound up the river from the Gulf, first sighted the s.s. Milwaukee when about the end of the Island of Orleans, some considerable distance ahead. She continued on, keeping their relative distances apart, till the Milwaukee stopped her engines to take on the river pilot, when she rapidly approached, and by the time the exchange of pilots had taken place she was only a little abaft the beam, proceeding very considerably faster than the Milwaukee, and when a short distance ahead of the latter vessel (opposite the Allan wharf, their witnesses and their log show) without giving any warning, that is, one short blast, intimating, 'I am directing my course to starboard,' put her helm hard aport to cross to the north shore, going ahead on the port and backing on the starboard engine, clearly proving that she could not have been as far from the north shore as was endeavored to be shown by the evidence, as the distance was so short that she had to be turned quickly. Carrying out this manœuvre she fell athwart hawse the Milwaukee, and the collision took place. It appears from the evidence of the Montcalm that it was not until a collision was inevitable that her engines were reversed. The Montcalm being a small vessel compared to the Milwaukee, only 245 ft. long, with twin screws, could, in the opinion of the Court, have been manœuvred and turned around in her own length, whereas the Milwaukee, being a large, heavily laden freight vessel with a single screw, could not so easily be controlled.

"Capt. Belanger, in his evidence, states that he was devoting his attention and carefully scanning the wharves on the north shore to go alongside his berth; no proper attention was given to the movements of the Milwaukee, and she was upon them before they really realized the situation. Capt. Belanger states that he considered the Montcalm was six cables' length from the Milwaukee when he ported his helm, evidently not taking into consideration the fact that the Milwaukee was proceeding up the river, with the combined force of a three-knot flood tide and the way acquired from her own engines, which had been put ahead when the pilot took charge, so as a matter of fact, when he ported his helm, the Milwaukee must have been very near; further, the whole distance from the ferry wharf to the upper end of the Allan wharf is only about 4½ cables.

"Both the Montcalm and the Milwaukee were well founded in every respect, that is to say, that the Board of Trade regulations in regard to boats, life saving apparatus and the certificates of the officers, both deck and engineers, were carried out; the master and chief engineer of the Montcalm holding the best certificates obtainable, as also did the same officers on board the Milwaukee.

"The Court is of the opinion that the master of the Montcalm was guilty of a very grave error of judgment and careless contravention of the rules of the road, in not more carefully ascertaining the exact position of the vessel which he had so recently passed, and before porting his helm, giving the usual signal and receiving a reply. Capt. Belanger has had 35 years' experience in the Government Service, but the court cannot overlook his want of care in this case, which might easily have caused large loss of life, and therefore suspends his certificate for 12 months from May 7, the date of the accident. The master and officers of the C.P.R. steamship Milwaukee are exonerated from all blame."

Coast, Lake and River Officers for 1908.

The following appointments have been made by navigation companies engaged on the coast, lake and river routes for their various vessels during the current year, in addition to those already published. In the first column is given the name of the vessel, in the second, that of the captain, and in the third, that of the chief engineer:

BLACK DIAMOND STEAMSHIP LINE, GLACE BAY, N.S.

Bonavista	D. C. Fraser	G. Lawson
Borgestad	J. Folkman	
Cabot	J Kemp	S. A. Stevenson
Cacouna	L. Holmes	P. J. Lahey
Cape Breton	A. F. Macdonald	D. Cameron
Catalone	T. L. Glover	A. Brown
Coban	A. MacPhail	J. Scott
Dominion	H. Dawson	A. S. Mills
Fornebo	C. Hansen	A. Hansen
Fritzoe	E. Quale	O. Fuglestad
Harold	E. A. Berg	C. Muller
Hermod	A. Gabrielu	C. Schjelderuys
Kronprins Olav	P. A. Nilsen	
Louisburg	H. W. Gould	C. D. Cooke
Mystic	J. Cain	R. A. Richards
Norfolk	B. D. Olsen	G. Glumbeksen
Ocean	G. Olsen	
Ocland	H. Brun	O. Pedersen
Tanke	H. Hansen	
Trold	P. U. Foyn	S. Lie

CRYSTAL STEAMSHIP CO., ST. JOHN, N.B.

Sincennes	F. Mabee	W. W. Roberts

DOMINION IRON AND STEEL CO., SYDNEY, N.S.

Ellen	O. Jacobsen	K. Follung
Felix	J. E. Berggreen	L. Lystad
Sygna	O. Olsen	

MONTREAL AND CORNWALL NAVIGATION CO., CORNWALL, ONT.

Emerald	J. Lefevre	E. Chertier
Filgate	P. Haim	N. Marchand

NORTHERN NAVIGATION CO., TORONTO.

City of Toronto	A. A. Bellerose	C. LaVallee

O'CONNOR STEAMBOAT AND HOTEL CO., TEMAGAMI, ONT.

Belle of Temagami	G. Eyre	A. Wilson
Chance	W. Friday	J. S. Muskett
Spry	C. Moore	
Wanda		G. M. Beecher

QUEBEC TRANSPORTATION AND FORWARDING CO., QUEBEC.

Aberdeen (bge.)	J. C. Perron	
A. D. (bge.)	M. Lague	
Florence	W. J. Stitt	W. H. Kerr
F. D. Ewen (bge.)	A. Monette	
J. H. Hackett	J. Thibault	J. Goudreau
M. E. Hackett	H. Paquet	J. Legrand
Wm. Hackett	M. Allison	J. Gosselin
Zapotic (bge.)	A. de Repentigny	

TEMAGAMI NAVIGATION CO., TORONTO.

Temagami	J. Shaw	A. E. Wanamaker

WHITE PASS AND YUKON ROUTE.

Bonanza King	F. B. Turner	F. J. Mavis
Casca	J. O. Williams	J. R. Gaudin
Dawson	W. H. Turnbull	J. R. Young
Gleaner	T. Richards	J. Kelly
Scotia	W. T. Bragg	D. Sullivan
Selkirk	G. H. McMaster	A. Bertram
White Horse	I B. Sanburn	P Larsson

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie Canals in April:

Articles.			Canadian Canal	U.S. Canal	Total
Copper	Eastbound	Net tons		1,109	1,109
Grain	"	Bushels			
Building stone	"	Net tons			
Flour	"	Barrels		55,500	55,500
Iron ore	"	Net tons			
Pig, iron	"	"			
Lumber	"	M. ft. B.M.			
Wheat	"	Bushels	371,400	1,606,080	1,977,480
General merchandise	"	Net tons	30	272	302
Passengers	"	Number	2	12	14
Coal, hard	Westbound	Net tons	2,032		2,032
Coal, soft	"	"	4,674	7,974	12,648
Flour	"	Barrels			
Grain	"	Bushels			
Manufactured iron	"	Net tons	1,772	3,452	5,224
Iron ore	"	"			
Salt	"	Barrels	5,700	8,545	14,245
General merchandise	"	Net tons	10,403	8,369	18,772
Passengers	"	Number	87	21	108
Freight—Eastbound		Net tons	11,172	55,113	66,285
" Westbound		"	19,696	21,077	40,773
Total freight		"	30,868	76,190	107,058
Vessel passages		Number	95	39	134
Registered tonnage		Net	85,208	51,188	136,396

Canadian Canal opened April 21 and U.S. Canal opened April 27, 1908.

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Especially designed for operation on heavy grades and sharp curves such as are found on branch lines of railroads, mining roads, etc. Every wheel a driver, giving a long total wheel base and creating great tractive power. Weight of fuel and water useful for adhesion.

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CLEVELAND CITY FORGE & IRON CO.

Cleveland, Ohio, U.S.A.

JAMES THOMSON, Pres. and Mang. Director. J. G. ALLAN, Vice-President. JAMES A. THOMSON, Secretary. ALEX. L. GARTSHORE, Treasurer.

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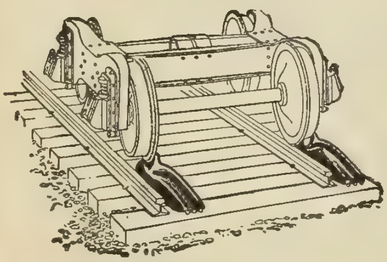

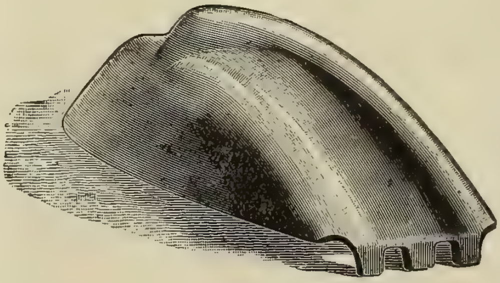

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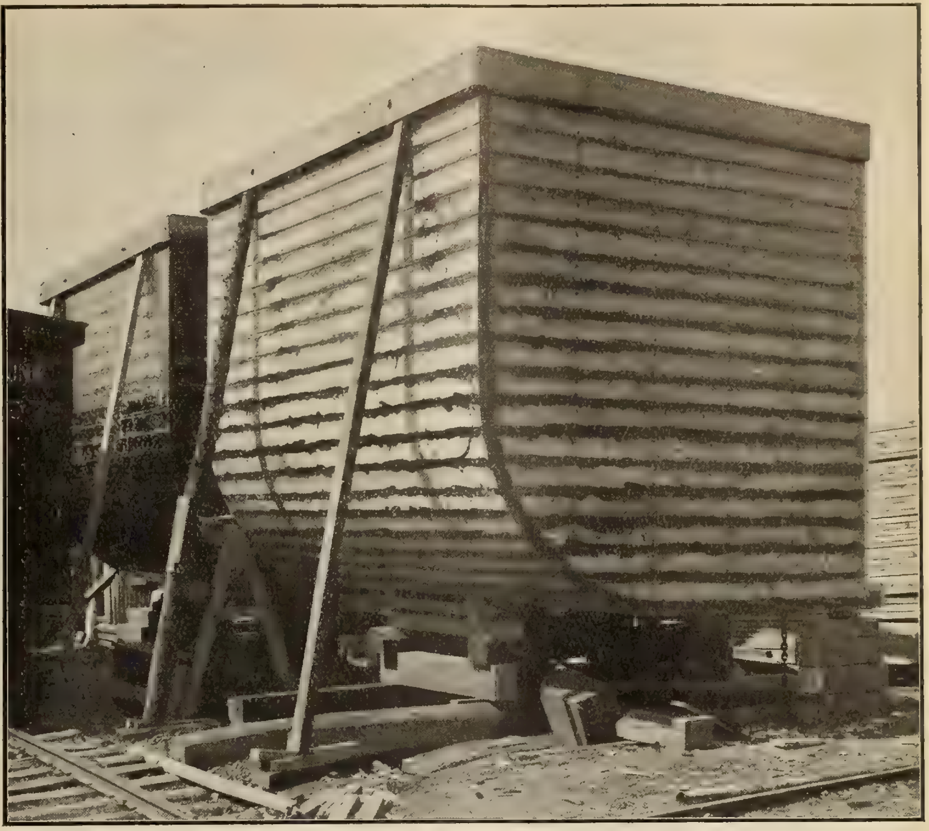
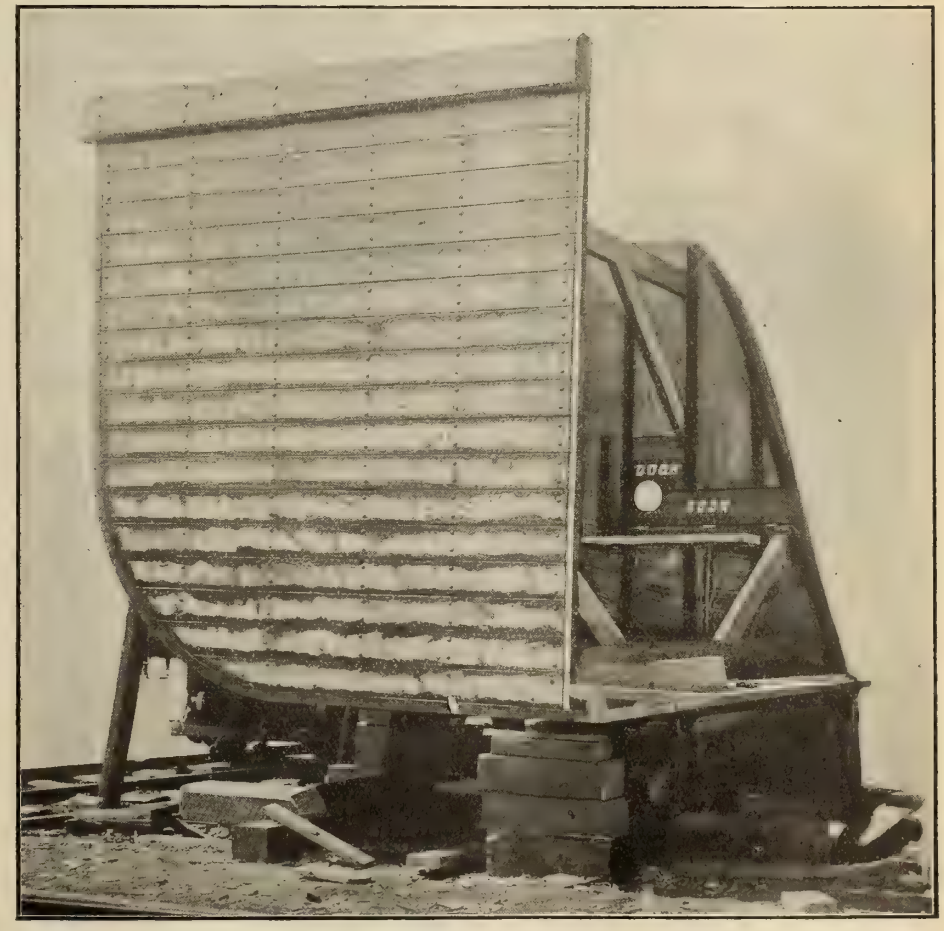
Caisson for Repairing Propellers.

With the advent of the fast twin-screw steamship Cayuga in the trans-lake Ontario trade, the Niagara Navigation Co. found itself face to face with the possibility of having the vessel laid off for an indefinite period in case of the breaking of one or more blades of her propellers, owing to the fact that the nearest dry dock is at Kingston, Ont., and that the dock might not be available when required. With a view, therefore, of providing for the speedy repair of the vessel in case of such a contingency, the company has had designed and constructed what may be described as two portable dry docks for the exclusive use of the Cayuga. The arrangement is an ingenious one, and consists of two caissons, each about 16 by 12 ft., and having a depth of about 12 ft., one side being entirely open. The upper of the accompanying illustrations shows the two caissons prior to launching, that in the foreground being for the port side, and that in the rear being for the starboard side. The end of the caisson shown to the right in the illustration is finished with a straight edge, which will fit close up to the sternpost; the edge of the floor of the caisson is also straight so as to fit beneath the keel, the edge of the forward end being shaped to correspond to the curvature of the hull. The two gates or doors showing in the lower illustration, are cut in the forward end to admit of the propeller shaft being brought inside the caisson, an aperture being arranged so as to fit around the shaft. The upper door opens upwards and the lower one downwards. These are opened to admit the shaft, and are then closed by chain attachments.

Each caisson is constructed of steel framework, planked on the outside and braced internally by heavy timbers. When it is required to replace a blade of the propeller, whichever caisson it is necessary to use will be towed to the side of the vessel and, by means of chains passed under the hull, will be drawn into position, rods and turnbuckles attached to the upper portion of the vessel being used to hold it in position. The edges of each caisson, and of the hole through which the shaft passes, are fitted with heavy rubber bands for the purpose of aiding in making a watertight junction. The top of the caisson, when fixed in position for operation, is about 18 inches above the water level. After the caisson is affixed, and the doors closed, the water is pumped out and the workmen are enabled to get inside and to proceed with their work. To facilitate their operations two platforms are provided in each caisson, so that it is not necessary to pump them entirely clear of water. Each caisson weighs about three tons, and has a capacity of about 12,000 gals. of water. It can therefore be gathered that as this quantity of water is pumped out, the pressure on the outside will increase, and aid in holding the caisson in place, and in ensuring the junction with the hull being watertight. The lower illustration shows a portion of the interior of the port caisson, viewed from the stern end, and with the gates closed, the hole for the shaft being in the centre of the forward end. The caissons were designed and constructed under the supervision of B. W. Folger, Manager of the Niagara Navigation Co., by Jno. Whalen.

The device is also valuable for giving access to the stern shaft bearings. The idea is an ingenious one, and the tests made show that it is thoroughly practicable. A single caisson, constructed so as to fit round the stern of a vessel could be utilized for adjusting new blades to single screw steamships, and it might be possible to so develop the idea, by means of screws and double planking, to construct a caisson in such a way that it could be utilized for a number of vessels, not only for repairing propellers, but for replacing plates and effecting repairs below the water line.





* * *

The Richelieu and Ontario Navigation Co. has declared a quarterly dividend of 1¼%, payable June 1.

G. Poliquin, Secretary of the Montreal Longshoremen's Association, pleaded not guilty recently to a number of charges of having obtained sums of money from foreign immigrants on false pretences, and was remanded for enquiry.

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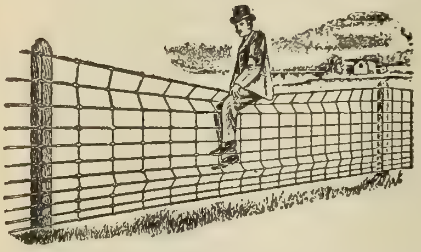

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Vessels Removed from the Register.

The following vessels were removed from the Canadian register during April, for the reasons assigned: Steam.—Aberdeen, Winnipeg, 26 tons, broken up; Athabasca, Winnipeg, 105 tons, broken up; Beaver, Ottawa, 8 tons, burnt; Brandon, Winnipeg, 119 tons, broken up; Kenora, Vancouver, 9 tons, wrecked; Lurline, Windsor, Ont., 40 tons, wrecked; Monarch, Winnipeg, 106 tons, broken up; Princess Helen, Winnipeg, 1 ton, broken up; Regina, Montreal, 411 tons, broken up; Una, Port Arthur, Ont., 12 tons, broken up; Widgeon, Winnipeg, 2 tons, broken up; Sailing.—A. G. Nish, Toronto, 43 tons, broken up; Annie E. Banks, Lunenburg, N.S., 135 tons, transferred to Barbados; Ark, Winnipeg, 49 tons, broken up; Athabasca, Winnipeg, 18 tons, broken up; Baden Powell, Chatham, N.B., 97 tons, wrecked; Bertha McKay, Winnipeg, 158 tons, broken up; Carl, Winnipeg, 32 tons, broken up; Couchiching, Winnipeg, 105 tons, broken up; Elizabeth Ann, Port Hawkesbury, N.S., 11 tons, broken up; Eventide, Windsor, N.S., 97 tons, lost; Fairford, Winnipeg, 437 tons, broken up; Fanny, Winnipeg, 159 tons, broken up; Hugh John, Lunenburg, N.S., 119 tons, transferred to Barbados; I. B. Saint, Halifax, N.S., 74 tons, wrecked; James R., Halifax, N.S., 51 tons„ wrecked; Jay, Winnipeg, 32 tons, broken up; John G. Walter, Parrsboro, N.S., 209 tons, transferred to Barbados; Lark, Winnipeg, 39 tons, broken up; Laura, Winnipeg, 35 tons, broken up; Mary A. Duff, Lunenburg, N.S., 90 tons, missing since Feb. 17, 1908; Marjorie J. Sumner, Maitland, N.S., 55 tons, wrecked; No. 2, Ottawa, 31 tons, broken up; Ocean Bride, Halifax, N.S., 23 tons, broken up; One, Winnipeg, 17 tons, broken up; Onyx, Liverpool, N.S., 99 tons, condemned; Palma, Lunenburg, N.S., 249 tons, missing since Jan. 11, 1908; Robert Evans, Winnipeg, 29 tons, broken up; Two, Winnipeg, 17 tons, broken up.

◆

Dry Dock Construction in Canada.

In explaining the Government bill, now before Parliament, to encourage the construction of dry docks, the Minister of Finance in Committee said the amendment was destined to adapt the machinery of the Act, which was put on the statute book some years ago, to some difficulties which had been met in its administration. Under this general legislation a dry dock had been constructed at Halifax, N.S., and another at Collingwood, Ont., and an agreement was entered into for the construction of one at Vancouver, B.C., which had not yet been constructed. The essential difference between the present law and the amendment touches two points. The limitation of the amount in the present law is 3% on $1,000,000, but in view of the increased size in steamers and the need of larger docks, it is proposed to increase the amount to $1,500,000, which, at 3%, represents $45,000. Under the act payments are to be made for 20 years, subject to the condition that the dock shall be at all times kept in successful operation. Some difficulty has been experienced in obtaining capital for the construction of docks on this account, and it was now proposed to provide that in the event of the company failing to operate the dock, the Government shall take possession of it. It is also provided that the subsidy shall be payable in the case of the construction of floating docks. The Government was desirous of promoting the construction of docks at appropriate places, but had no desire to make the conditions so easy that people would be tempted to go into the enterprise of dock construction at any port as a pure speculation, where the business did not warrant the outlay.

Notices to Mariners.

The Dominion Department of Marine has issued the following notices:

No. 29. April 27.—83. Quebec, Saguenay River, Pointe Roche anchorage, occasional lights. 84. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Lake St. Peter, curve No. 3, light not shown from Pointe du Lac front range lighthouse, lightship replaced in position.

No. 30. April 28.—85. Ontario, Lake Superior, Thunder Bay, Fort William, rearrangement of lights.

No. 31. April 30.—86. British Columbia, Vancouver Island, west coast, Pachena Point, lighthouse established, change in sounding of fog alarm.

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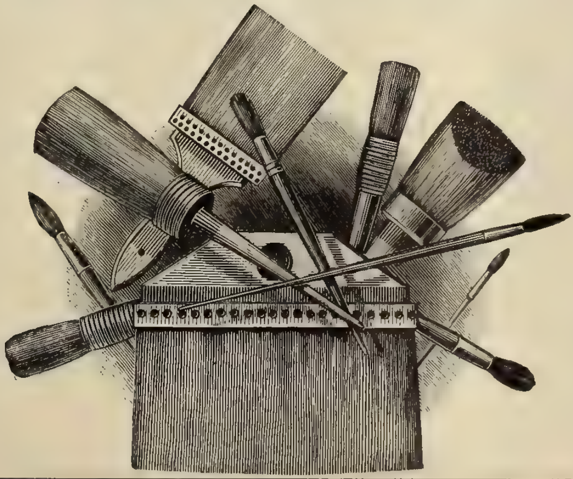

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Especially Designed For
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No. 32. April 30.—87. New Brunswick, south coast, Bay of Fundy, Chignecto channel, Anderson Hollow, shore light discontinued except as an emergency light. 88. Nova Scotia, Halifax harbor, McNab Island, Government rifle ranges.

No. 33. May 5.—89. British Columbia, Vancouver Island, southeast coast, Mayor channel, Lewis reef, light established on beacon. 90. British Columbia, Vancouver Island, west coast, Brooks Bay, off Lawn Point, uncharted reef.

No. 34. May 11.—91. Newfoundland, Labrador, Belle Isle, south end, intended change in character of light.

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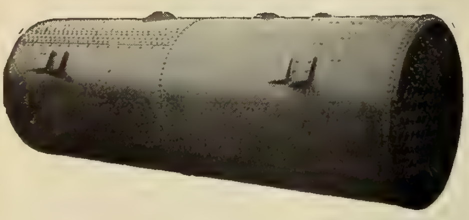

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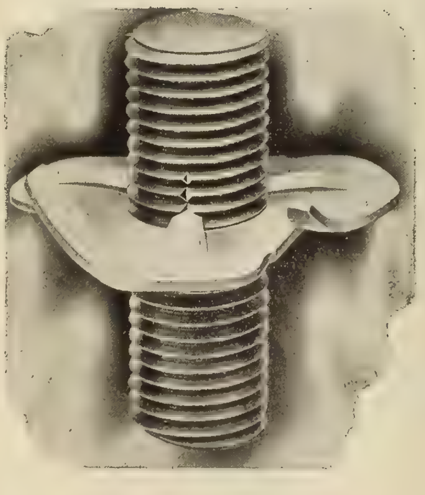

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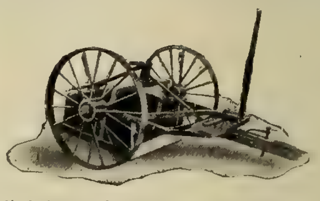

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Norwalk-Jett Collision Judgment.

The following judgment has been given by Commander Spain, R.N., Dominion Wreck Commissioner, and concurred in by Capt. A. Reid, Port Warden of Montreal, and J. Riley, Superintendent of Pilots, who sat with him as assessors, to investigate the collision which occurred between the steamboat Norwalk and the barge Jett in Lake St. Louis, on Oct. 23, 1907. The evidence of the crews of the tug Clide and the barges Jett and Winnipeg was taken at Montreal Oct. 28, 1907, and of the crew of the Norwalk at Windsor, Ont., Nov. 16, 1907:

"From the evidence adduced the barge Jett, bound from Prescott for Montreal with a cargo of about 21,000 bush. of flax seed, left the Soulanges Canal lashed alongside of the barge Winnipeg, both in tow of the tug Clide. All went well until nearing lightship Lake St. Louis no. 2, when the Norwalk steamer was seen approaching, and came in contact with the Jett immediately after the Clide and her tow had rounded lightship 2, causing the barges to break away from the tug, and from each other, and also causing the resultant damages. The night was fine, dark, but clear, with a strong northwest wind, and lights were visible a long distance. The barges appear to have been carefully towed, and were on the south side of the channel, as the evidence shows that the Winnipeg, which was on the lee, or south side of the tow, struck one of the stakes or spar buoys on that side of the channel. The Norwalk was bound from Quebec to Detroit with a cargo of pulpwood, the deckload of which was 6 ft. high. The weather was fine with a breeze from the northwest; the officer in charge could see the shore and lights plainly; the vessel was drawing 14′ 2″ aft, and 13′ 9″ forward; she had touched the ground several times, which may possibly have caused her to steer badly. The tug's lights were seen from the Norwalk and recognized as a tow when about a mile away; she, however, continued on, and immediately after the tug and the tow passing clear of the lightship, came in contact with the barge, at a point where the tow had not had time to recover after changing course to follow the tug.

"The Court considers that the Norwalk is to blame for the collision, inasmuch as the tow descending with the current and with a strong wind abeam, should have been given the right of way, and the Norwalk should have stopped far enough below the lightship 2, to have permitted the tug and her tow to pass into the straight reach of channel between lightship 2 and Lachine lightship. The collision resulted in serious damage to the Jett and her cargo, and might have resulted in loss of life, (more especially as the steamer Norwalk proceeded on her course without endeavoring to find out in any way what damage she had caused), had the cargo of the barge been wheat or grain, but owing to the peculiar oily nature of the cargo of flax seed, the vessel kept afloat and drifted out of the channel into shoal water, where she grounded, and the master and his sister were saved. The Court is unable to deal with the certificate of Capt. Frank Goodrow, who was master of the Norwalk at the time of the casualty, as he holds a U.S. license, and is therefore in this respect outside its jurisdiction. The Court, however, recommends that an action should be instituted against him under the Revised Statutes of Canada, sec. 924, chap. 113. In regard to Henry Chesnut, who was acting as pilot of the Norwalk at the time of the casualty, and who holds a Canadian master's certificate of competency as master of any steamer on the inland waters, granted at Ottawa April 24, 1884, after an examination passed at St. Catharines on March 11, 1884, the Court cannot acknowledge Mr. Chesnut as being legally in charge of the Norwalk, as he was not signed on the articles of that vessel, nor had he any authority to act as a pilot in the waters then being navigated at the time of the collision, as they were in the Montreal Pilotage district, and consequently under the jurisdiction of the Mon-

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treal pilotage authorities, and therefore as he was neither licensed as a pilot nor was an officer of the vessel, his certificate cannot be dealt with, but the facts of the case will be brought to the Department's attention."

◆

Among the Express Companies.

The evidence brought by the French Government for the extradition of a man on a charge of robbery at the American Ex. Co.'s office, Paris, France, was held recently to be insufficient, and he was released from custody at Montreal.

At the annual meeting of the Canadian Ex. Co. held at Montreal, May 2, the following officers and directors were elected for the current year: President, C. M. Hays; Vice-President and Manager, J. Bryce; Secretary-Treasurer, F. Scott; other directors, F. W. Morse, E. H. Fitzhugh, W. Wainwright, M. M. Reynolds, and H. Paton.

At the annual meeting of the Intercolonial Ex. Co., held at Montreal, May 2, the following officers and directors were elected for the current year: President, C. M. Hays; Vice-President and Manager, J. Bryce; Secretary-Treasurer, F. Scott; other directors, F. W. Morse, E. H. Fitzhugh, W. Wainwright, M. M. Reynolds, and H. Paton.

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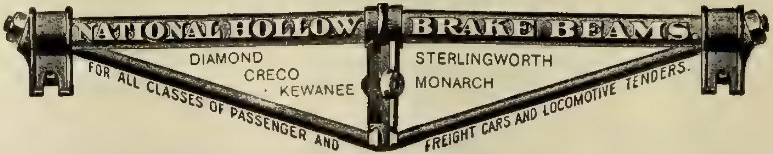
The name of the Hampton and St. Martin's Ry. Co. has been changed to St. Martin's Ry. Co.

The Read Stone Co., which has been incorporated under the New Brunswick Companies Act, with a capital of $150,000 and offices at Sackville, N.B., is authorized, among other things, to construct wharves, railway sidings, tracks and other transportation facilities, as well as to put up telegraph or telephone lines. The provisional directors are: H. C., G. and H. W. Read, of Sackville.

Canadian Express Co.'s Montreal Building.

The building which has been erected for the Canadian Express Co. on McGill St., Montreal, immediately opposite the G.T.R. general office building, is 130 ft. high from the street level, and contains basement and 10 stories, each floor having an area of about 6,800 sq. ft. The frontages are 114 ft. on McGill St., 86 ft. on St. Paul St., and 79 ft. on Youville Square. The foundation is built of Quebec granite, the superstructure being of grey canyon sandstone from Ohio. The basement will be used by the Canadian Ex. Co. for storage of on hand freight, records, etc. The first or ground floor will be occupied by the Canadian, American and National Ex. Cos. as local offices, freight receiving room, financial department, cashiers, etc. The second and third floors will be devoted to the Canadian Ex. Co.'s general offices. The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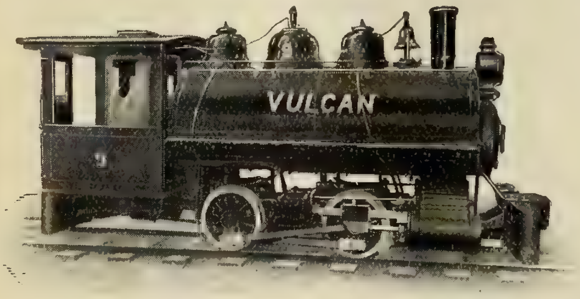

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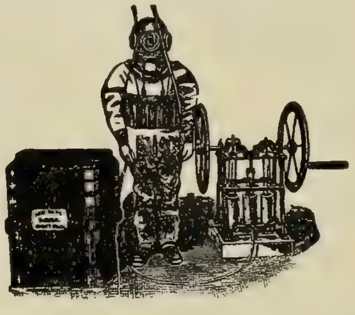

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audit and treasury department will be located on the second floor, while on the third will be the offices of the Vice-President and Manager, the Accountant, tariff department, Superintendent of Money Orders, and the division superintendents. The fourth, fifth and sixth floors are being rented to tenants. The seventh floor will be partly occupied by the G.T.R. Freight Claim Department. The eighth floor will be occupied by the G.T.R. Auditor of Passenger Accounts and staff. The ninth floor will be occupied by the General Purchasing Department, Medical Department, and Secretary of Pension Fund and staff, also by the G.T.R. Insurance and Provident Society, private branch telephone exchange, Superintendent of Telegraph and the offices of the Manager of the Canada Atlantic Transit Co. The tenth floor is being reserved for the G.T.P. Telegraph Co. An illustration of the building was published in our March issue.

The Canadian Ex. Co. will remove from its present quarters in the G.T.R. general office building to its new building early in June. The supply department, which is now located in basement of the G.T.R. general office building, will be removed to the second floor of the C.E. Co.'s local building near Bonaventure station.

Telegraph and Cable Matters.

E. H. Tetu, District Superintendent of the Dominion Government's North Shore lines, who spent the winter in Quebec, has returned to Longue Point de Mingan.

J. D. Oppe, Manager of the Marconi Wireless Telegraph Co. of Canada, has been elected to the directorate of the Marconi Wireless Telegraph Co. of America, for five years.

G. Marconi stated recently that a speed of 24 words a minute has been reached by his system between Canada and Great Britain, and that the business justified a duplication of the plant, for which purpose the shareholders had sanctioned an issue of $1,250,000.

As a result of a series of interviews with the Minister and Deputy Minister of Railways, and the General Manager of the Intercolonial Ry., the I.C.R. telegraph operators have been granted an increase of pay, amounting to about 10%, the increases to be apportioned to the different positions, as the growth of work and general conditions may warrant.

The telegraph cable between the mainland and Prince Edward Island was broken May 9, by fouling the anchor of the Government steamer Stanley, engaged in placing the buoys off Cape Traverse. The repairs were completed May 17, and telegraph service resumed. In the interval, the only communication with the island was by means of the steamships Northumberland and Empress.

The Minister of Public Works recently stated in the House of Commons that a proposal had been made to the Government by the Grand Manan Telephone Co., to take over the telegraph cable or cables connecting Grand Manan Island with the New Brunswick mainland. The proposal is still under consideration. The Government operates 7½ knots of cable between Campobello and Grand Manan Island, and 25¼ miles of land lines on the island.

A bill to amend the Railway Act has been given a first reading in the House of Commons, having for its object the provision of an eight hour day for despatchers and operators on Canadian railways. The bill has been introduced at the request of the parliamentary representative of railway employes, and is being asked for on the ground that an act of the U.S. Congress came into operation April 1, providing for a nine hour day for despatchers and telegraphers. It is not expected that the bill will be passed this session.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
- Canadian Ry. Accident Ins. Co.....Ottawa, Ont

Advertising Matter
- Valentine & Sons Publishing Co..........Montreal

Aerated Waters
- E. L. Drewry........................Winnipeg.

Air Brakes and Fittings
- Canada Foundry Co...................Toronto.
- Canadian Westinghouse Co......Hamilton Ont

Ales
- E. L. Drewry........................Winnipeg

Angle Bars
- Hamilton Steel & Iron Co.......Hamilton, Ont

Anti Rail Creepers
- Belle City Malleable Iron Co........Racine, Wis.

Automobiles
- Polson Iron Works, Ltd ....Toronto

Axes
- James Smart Mfg. Co...........Brockville, Ont

Axe Steel
- Montreal Steel Works................ Montreal.

Axles
- James Hutton & Co...................Montreal.
- Jas. W. Pyke & Co...................Montreal.
- Rhodes, Curry & Co..............Amherst, N.S.

Badges
- R. Woodman Mfg. & Supply Co....Boston, Mass.

Baggage Checks
- R. Woodman Mfg. & Supply Co....Boston, Mass.

Beacons
- International Marine Signal Co.........Ottawa.

Bearings, Side
- Chicago Railway Equipment Co.....Chicago, Ill.

Blankets and Bedding
- The Hudson's Bay Co.........................

Blasting Powder
- Standard Explosives Limited...........Montreal.

Boilers
- Babcock & Wilcox (Ltd.)...............Montreal.
- Canada Foundry Co...................Toronto.
- Jno.McDougall,Caledonian IronWorks Co. Montreal
- Polson Iron Works...................Toronto.

Boilers, Portable
- Canada Foundry Co...................Toronto.

Boilers, Stationary and Marine
- Babcock & Wilcox (Ltd.)..............Montreal.

Boiler, Staybolt Iron or Steel Bars
- Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Boilers, Steam
- Babcock & Wilcox (Ltd.).............Montreal

Boilers, Water Tube
- Babcock & Wilcox (Ltd.).............Montreal.
- Jno. McDougall,Caledonian Iron Works Co.Montreal

Boilers Tubes
- Jas. W. Pyke & Co...................Montreal.

Bolsters
- Dominion Car and Foundry Co........Montreal.

Bolts, Bridge
- Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
- Toronto Bolt and Forging Co...........Toronto

Bolts, Track
- Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
- Mussens Limited......................Montreal.

Brake Beams
- Chicago Railway Equipment Co......Chicago, Ill.
- Dominion Car and Foundry Co........Montreal

Brake Shoes
- American Brake Shoe & F'dry Co. .Mahwah, N.J
- Canadian Iron and Foundry Co........Montreal
- N. J. Holden Co., Ltd.................Montreal.
- Railway Materials Co...........New York City.

Brass and Copper Cloth
- The B. Greening Co............. Hamilton, Ont

Bridge Numbers
- Acton Burrows Limited ....Toronto

Bridges
- Canada Foundry Co...................Toronto.
- Canadian Bridge Co...........Walkerville, Ont.
- Dominion Bridge Co..................Montreal.

Buckets, Coal, Ore and Concrete
- Canadian Fairbanks Co., Ltd..........Montreal.
- Kilgore-Peteler Co...........Minneapolis, Minn

Bumping Posts
- McCord & Co.......................Chicago, Ill.

Buoy Lighting
- Safety Car Heating and Lighting Co. .New York.

Buoys
- International Marine Signal Co.........Ottawa.

Cables, Electric and Feeder
- E. F. Phillips Electrical Works, Ltd.....Montreal.
- The Wire and Cable Co...............Montreal

Caboose Heaters
- Geo. R. Prowse......................Montreal.

Car Castings
- American Brake Shoe & F'dry Co...Mahwah, N.J.
- Canadian Iron and Foundry Co.........Montreal.

Car Cleaner
- Modoc Soap Co...............Philadelphia, Pa.

Car Closets
- Duner Co.........................Chicago, Ill.

Car Curtains and Fixtures
- N. J. Holden Co., Ltd................Montreal.

Car Heating
- Wm. C. Baker Heating & Supply Co. .New York.
- CanadianGold Car Heating& LightingCo.Montreal.
- Safety Car Heating and Lighting Co...New York.

Car Jacks
- Canadian Fairbanks Co., Ltd.........Montreal.
- F. H. Hopkins & Co...................Montreal.
- Mussens Limited......................Montreal.

Car Kitchen Equipments
- Geo. R. Prowse......................Montreal.

Car Lighting
- Bliss Electric Car Lighting Co...Milwaukee, Wis.
- Consolidated Ry. Electric Light. & Equip. Co., N.Y.
- CanadianColdCar Heating& Lighting Co.Montreal.
- Safety Car Heating and Lighting Co...New York.

Car Movers
- Canadian Fairbanks Co., Ltd.........Montreal.
- F. H. Hopkins & Co...................Montreal.
- Mussens Limited......................Montreal.
- R. Woodman Mfg. & Supply Co ....Boston, Mass.

Car Ranges
- Geo. R Prowse.......................Montreal.

Car Replacers
- Alexander Car Replacer Mfg. Co.....Scranton, Pa.
- N. J. Holden Co., Ltd................Montreal.
- F H. Hopkins & Co...................Montreal.

Car Seals
- R. Woodman Mfg. & Supply Co.....Boston, Mass.

Car Wash Brushes
- Wolfe Brush Co..................Pittsburg, Pa.

Cars
- American Car and Equipment Co....Chicago, Ill.
- Canada Car Co., (Ltd)...........Montreal, Que.
- Crossen Car Mfg. Co.............Cobourg, Ont.
- Dominion Car and Foundry Co........Montreal.
- J. T. Gardner ....Chicago, Ill.
- Hart-Otis Car Co. (Ltd.) ....Montreal.
- Hotchkiss, Blue & Co..............Chicago, Ill.
- Kilgore-Peteler Co...........Minneapolis, Minn.
- Preston Car and Coach Co., Ltd.. Preston, Ont.
- Rhodes Curry & Co..............Amherst, N.S.

Cars, Coal
- Kilgore-Peteler Co...........Minneapolis, Minn.

Cars, Mine
- Canadian Fairbanks Co., Ltd.........Montreal.
- Kilgore-Peteler Co...........Minneapolis, Minn.

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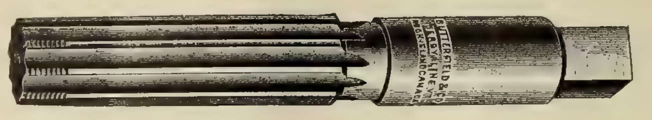

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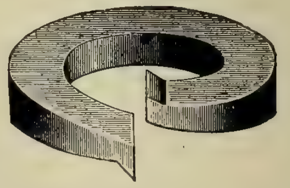

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Castings
Crossen Car Mfg. Co....Cobourg, Ont.

Castings, Brass
Canadian Bronze Co....Montreal.
Canadian Iron and Foundry Co....Montreal.
Kerr Engine Co....Walkerville, Ont.
St. Thomas Brass Co....St. Thomas, Ont.

Castings, Iron
Canada Car Co., Ltd....Montreal.
Canadian Iron and Foundry Co....Montreal.
Kerr Engine Co....Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co..Mahwah, N.J.

Castings, Malleable
Taylor & Arnold....Montreal.

Castings, Steel
Canadian Iron and Foundry Co....Montreal.
Montreal Steel Works....Montreal.
Rhodes Curry & Co....Amherst, N.S.

Cast-Steel Hammers
American Brake Shoe & F'dry Co..Mahwah, N J.

Cast-Steel Track Tools
American Brake Shoe & F'dry Co..Mahwah, N.J.

Cast-Steel Wrenches
American Brake Shoe & F'dry Co..Mahwah, N.J.

Cement Machinery
Jas. W. Pyke & Co....Montreal.

Chains
B J Coghlin & Co....Montreal.

Charcoal Iron Staybolt Bars
Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.

Clevis Nuts
Cleveland City Forge & Iron Co....Cleveland, O.

Coal Haulage Ropes
The B. Greening Co....Hamilton Ont.

Concrete Mixers and Rock Crushers
Canadian Fairbanks Co., Ltd....Montreal.
F. H. Hopkins & Co....Montreal.
Mussens Limited....Montreal.
Toronto Pressed Steel Co....Toronto.

Contractors' Plant
American Car and Equipment Co....Chicago, Ill.
M. Beatty & Sons....Welland, Ont.
Canadian Fairbanks Co., Ltd....Montreal.
J. T. Gardner....Chicago, Ill.
F. H. Hopkins & Co....Montreal.
The W. H. Kelson Co....Montreal.
Kilgore-Peteler Co....Minneapolis, Minn.
Mussens Limited....Montreal.
Toronto Pressed Steel Co....Toronto.

Contractors' Supplies
F. H. Hopkins & Co....Montreal.
Rice Lewis & Son....Toronto.
Toronto Pressed Steel Co....Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.)....Montreal.

Cooking Apparatus
Geo. R. Prowse....Montreal.

Copperware
Geo. R. Prowse....Montreal.

Copying Presses
James Smart Mfg. Co....Brockville, Ont.

Corrugated Furnaces
Continental Iron Works....Brooklyn, N.Y.

Counter Dusters
Wolfe Brush Co....Pittsburg, Pa.

Couplers, Car and Locomotive
Acme Railway Equipment Co..Philadelphia, Pa.
Latrobe Steel & Coupler Co....Philadelphia, Pa.
McConway & Torley Co....Pittsburg, Pa.
National Malleable Castings Co..Cleveland, Ohio.
Taylor & Arnold....Montreal.
Washburn Steel Castings & Coupler Co.,
....Minneapolis, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co....Toronto.

Cross Arm Braces
Canadian General Electric Co....Toronto.
Toronto Bolt and Forging Co....Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co....Toronto.

Crowbars
B. J. Coghlin & Co....Montreal.
Toronto Bolt and Forging Co....Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co, Hamilton.

Cuts
Acton Burrows Limited....Toronto.

Derailing Devices
Hayes Track Appliance Co....Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co....Montreal.
The B. Greening Co....Hamilton, Ont.

Derricks
M. Beatty & Sons....Welland, Ont.
Miller Bros. & Toms....Montreal.
Mussens Limited....Montreal.

Dies
Butterfield & Co....Rock Island, Que.

Diving Outfits
John Date....Montreal.
Mussens Limited....Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards....Syracuse, N.Y.

Door Signs
Acton Burrows Limited....Toronto.

Draft Gear
Cardwell Mfg. Co....Chicago, Ill.
Farlow Draft Gear Co....Baltimore, Md.
McCord & Co....Chicago, Ill.
Standard Coupler Co....New York City.

Drawing Materials
James Foster....Toronto

Dredges
M. Beatty & Sons....Welland, Ont.

Drills
W. Abbott....Montreal

Drills, Twist
Baldwin Steel Co....New York.

Dry Goods
The Hudson's Bay Co....

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Kilgore-Peteler Co....Minneapolis, Minn.
Toronto Pressed Steel Co....Toronto.

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Acton Burrows Limited....Toronto.

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Canada Foundry Co....Toronto.
Canadian Fairbanks Co., Ltd....Montreal.
Dominion Bridge Co....Montreal.
Mussens Limited....Montreal.

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American Brake Shoe & F'dry Co..Mahwah, N J.

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Ontario Wind Engine and Pump Co....Toronto.

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Canadian Fairbanks Co., Ltd....Montreal.

Engines, Stationary and Marine
Polson Iron Works....Toronto.

Explosives
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Canada Foundry Co....Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co..Owen Sound, Ont.
Page Wire Fence Co. Ltd....Walkerville, Ont.

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Mussens Limited....Montreal.

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Fog Signals
International Marine Signal Co....Ottawa.

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Canada Car Co., Limited....Montreal.
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Crossen Car Mfg. Co....Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd..Hamilton, Ont.
Standard Steel Works....Philadelphia, Pa.

Fuse Batteries
Standard Explosives Limited....Montreal.

Fuse Detonators
Standard Explosives Limited....Montreal.

Gaskets
McCord & Co....Chicago, Ill

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Gartshore-Thompson Pipe & F'dry Co., Hamilton.

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Canada Foundry Co....Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co..Owen Sound, Ont.
Page Wire Fence Co. Ltd....Walkerville, Ont.

Glue Brushes
Wolfe Brush Co....Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co....Chicago, Ill.

Groceries
The Hudson's Bay Company....

Hammers
James Smart Mfg. Co....Brockville, Ont.

Handcars
Canadian Fairbanks Co., Ltd....Montreal.
Crossen Car Mfg. Co....Cobourg, Ont.
F. H. Hopkins & Co....Montreal.
Mussens Limited....Montreal.
Rice Lewis & Son....Toronto.
Toronto Pressed Steel Co....Toronto.

Hardware
The Hudson's Bay Co....
Rice Lewis & Son....Toronto.

Headlights
The N. L. Piper Railway Supply Co....Toronto.

Headlinings
Crossen Car Mfg. Co....Cobourg. Ont.

Hoisting Machinery
Brown Hoisting Machinery Co....Cleveland, Ohio.
Canadian Fairbanks Co., Ltd....Montreal.

Hoists (Pneumatic)
Taylor & Arnold....Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hallow Staybolt Co..Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co....Chicago, Ill.

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Kerr Engine Co....Walkerville, Ont.

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Iron, Pig
Hamilton Steel & Iron Co., Ltd..Hamilton, Ont.

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Acton Burrows Limited....Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.

Jacks
James Smart Mfg. Co....Brockville, Ont.

Japans
McCaskill, Dougall & Co....Montreal.

Journal Bearings
Canadian Bronze Co....Montreal.
Crossen Car Mfg. Co....Cobourg, Ont.
Kerr Engine Co....Walkerville, Ont.
Jas W. Pyke & Co....Montreal.
St. Thomas Brass Co....St. Thomas, Ont.

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McCord & Co....Chicago, Ill.

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Wolfe Brush Co....Pittsburg, Pa.

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Canadian Westinghouse Co....Hamilton. Ont.

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The Hiram L. Piper Co....Montreal.
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Launches
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Canadian Fairbanks Co., Ltd....Montreal.
F. H. Hopkins & Co....Montreal.
Mussens Limited....Montreal.

Locomotive Driver Brake Shoe
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co....Montreal.

Locomotive Gauges
Taylor & Arnold....Montreal.

Locomotive Lagging and Covering
Taylor & Arnold....Montreal.

Locomotive Pop Valves
Taylor & Arnold....Montreal.

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Burnham, Williams & Co....Philadelphia, Pa.
Canadian Locomotive Co....Kingston, Ont.
Montreal Locomotive Works (Ltd.)....Montreal.
H. K. Porter Co....Pittsburg, Pa

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Lima Locomotive Co....Lima, O.

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Canada Foundry Co....Toronto.
Montreal Locomotive Works (Ltd.)....Montreal.

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Burnham, Williams & Co....Philadelphia, Pa.
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Locomotives (Rack)
Burnham, Williams & Co.......Philadelphia, Pa.
Canadian Locomotive Co.........Kingston, Ont.
Montreal Locomotive Works (Ltd.)....Montreal.

Locomotives (Steam)
American Car & Equipment Co......Chicago, Ill.
Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co....................Toronto.
Canadian Fairbanks Co., Ltd.........Montreal.
Canadian Locomotive Co........Kingston, Ont.
J. T. Gardner ....Chicago, Ill.
Hotchkiss, Blue & Co...............Chicago, Ill.
The W. H Kelson Co.................Montreal.
Lima Locomotive Co.....................Lima, O.
Montreal Locomotive Works (Ltd.)....Montreal
H. K. Porter Co.................Pittsburg, Pa.
Vulcan Iron Works...........Wilkesbarre, Pa.

Locomotive Staybolts
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.
Flannery Bolt Co................Pittsburg, Pa.

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McCord & Co......................Chicago, Ill.
Taylor & Arnold......................Montreal.

Machine Tools
W. Abbott............................Montreal.
Canadian Fairbanks Co...............Montreal.

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Jno. McDougall,Caledonian IronWorks Co.Montreal

Machinery Special
Miller Bros. & Toms..................Montreal.

Machinery, Transmission
Canadian Fairbanks Co., Ltd.........Montreal.
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Manganese Steel Castings
Montreal Steel Works.................Montreal.

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Canadian Iron and Foundry Co........Montreal.

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Rice Lewis & Son.....................Toronto.

Measuring Tapes
Lufkin Rule Co.................Saginaw, Mich.

Milepost Numbers
Acton Burrows Limited................Toronto.

Milling Cutters
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Baldwin Steel Co.....................New York.

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McCord & Co......................Chicago, Ill.

Nickel
The Orford Copper Co................New York.

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Numbers
Acton Burrows Limited................Toronto.

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Dunning & Eckenstein ....Montreal.
Positive Lock Washer Co.......... Newark, N.J.

Nuts, Square and Hexagon
Canada Foundry Co....................Toronto.
Toronto Bolt and Forging Co..........Toronto.

Oakum
The Hudson's Bay Company..................

Office Fittings
Canadian Office & SchoolFurnitureCo.,Preston,Ont.

Office Signs
Acton Burrows Limited................Toronto.

Oil Furnaces
Railway Materials Co..........New York City.

Oil Tank
S. F. Bowser & Co. Limited.. ....Toronto.

Oils
Canadian Oil Co......................Toronto.
Galena Signal Oil Co. Franklin, Pa., and Toronto.

Packing
Canadian Fairbanks Co., Ltd.........Montreal.
The N. L. Piper Railway Supply Co....Toronto.

Paint Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co..................Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Paints
Canadian Oil Co......................Toronto.

Pictorial Post Cards
Valentine & Sons Publishing Co..... ...Montreal.

Pinch Bars
The N. L. Piper Railway Supply Co....Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co...New York.

Pipe Stocks
Butterfield & Co.............Rock Island, Que.

Platforms, Steel
Standard Coupler Co............New York City.

Ploughs, Contractors'
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co.............Toronto.

Pneumatic Tools
N. J. Holden Co., Ltd...............Montreal.

Porter
E. L. Drewry.........................Winnipeg.

Portable Boilers
Babcock & Wilcox (Ltd.).............Montreal.

Printing
The Hunter-Rose Co...................Toronto.
The Mail Job Printing Company........Toronto.

Pumps
S. F. Bowser & Co., Limited..........Toronto.
Canadian Fairbanks Co...............Montreal.
Canada Foundry Co....................Toronto.
Ontario Wind Engine and Pump Co....Toronto.
James Smart Mfg. Co...........Brockville, Ont.

Pumps (Centrifugal)
M Beatty & Sons................Welland, Ont.

Rail Benders, Roller
F. H. Hopkins & Co..................Montreal.
Montreal Steel Works................Montreal.

Rails (new)
Dominion Iron & Steel Co..........Sydney, N.S.
Drummond. McCall & Co..............Montreal.
J. T. Gardner......................Chicago, Ill.
J. J. Gartshore.......................Toronto.
F. H. Hopkins & Co..................Montreal.
Kilgore-Peteler Co........... Minneapolis, Minn.

Rails (for relaying)
F. H Hopkins & Co...................Montreal.
J. J. Gartshore.......................Toronto.
Mussens Limited.....................Montreal.
Jas. W. Pyke & Co............. ....Montreal.

Rail Joints
The Rail Joint Co. of Canada ....Montreal.

Railway Pile Drivers
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.

Railway Supplies
Canadian Fairbanks Co...............Montreal.
The W. H. Kelson Co........... ....Montreal
The Hiram L. Piper Co...............Montreal.
The N. L. Piper Railway Supply Co....Toronto.
Rice Lewis & Son.....................Toronto.

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W. Abbott............................Montreal.
Baldwin Steel Co....................New York.
Butterfield & Co.............Rock Island, Que.

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Geo. R. Prowse......................Montreal.

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Toronto Bolt and Forging Co..........Toronto.

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Montreal Steel Works................Montreal.

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W. H. Knowlton ....Toronto.

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Bechtels Limited...............Waterloo, Ont.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co.............Toronto.

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Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

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See Purchasing Agents' Guide on page 531

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THE
Railway and Marine World
With which are incorporated The Western World and
The Railway and Shipping World, Established 1890

Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' interests

Old Series, No. 207.
New Series, No. 125.
TORONTO, CANADA, JULY, 1908.
For Subscription Rates, See page 497.
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CONQUERING PATRIOTISM REIGNS.

Toronto's Great Tribute to Sir Thomas Shaughnessy.

"Conquering Patriotism Reigns" was the new interpretation of the letters "C.P.R." given by W. F. Cockshutt, M.P., amid ringing cheers, at the dinner tendered to Sir Thos. G. Shaughnessy by the Toronto Board of Trade at the King Edward Hotel, Toronto, June 15. Over 250 members of the Board and guests, among whom were very many of the city's leading business, financial and professional men, attended the dinner, which was a brilliant function, an enthusiastic tribute to the C.P.R. President, and a fitting commemoration of the opening of the new line from Bolton to Romford, Ont., which gives the C.P.R. its own direct line from Toronto to Sudbury, and greatly reduces the time between the Queen City and Winnipeg and other northwestern points. The President of the Board of Trade, L. H. Clarke, occupied the chair, and in addition to Sir Thos. G. Shaughnessy, the invited guests included the Lieutenant-Governor of Ontario, Sir Mortimer Clark; four C.P.R. directors, Sir Sandford Fleming, Hon. L. J. Forget, E. B. Osler, M.P., and W. D Matthews; Hon. F. Cochrane, of the Ontario Government, and the Mayor of Toronto.

Sir Mortimer Clark, replying to the toast of the Lieutenant-Governor of Ontario, expressed the pleasure he had in meeting so many interested in the welfare of the country, and especially in the great question of transportation. He joined with them in doing honor to their distinguished guest, and incidentally to the great company which he represented. Sir Mortimer told of many experiences which had fallen to his lot in the course of his transcontinental journeys from the time when the buffalo roamed the plains down to the present. He could not on those occasions fail to think of the miserable opposition to those men who had helped to build the great steel road across the continent. If those men after risking their all had obtained great fortunes, then he was sure that they had only obtained their due. "Had it not been for that road," he said, "British Columbia to-day would not be British Columbia." He could not, when looking at the rails of that road, help but think of the word "Craigellachie," "Stand fast," cabled from one great Scotchman in London to another in Canada, at the time when the fortunes of the road were at its lowest. No one at that time had thought of the future before the C.P.R., a road which would be a highway between the east and the west, opening up homes for untold thousands.

"Every year that has passed, that road has been more and more a blessing to this country," declared Sir Mortimer. "When it was first constructed it was the very salvation of this country. It was the means of retaining the Dominion intact, and making Canada what it is to-day. The more I think of this road, the more I think of the vast benefits it has conferred upon this country, the more am I animated by the spirit of gratitude towards those men who conceived the idea of its construction, and the financiers whose ability enabled its completion. The great fault of the majority of our roads has been that they have been impoverished to pay dividends which ought never to have been paid; but the C.P.R. has been honestly managed, its stock is not watered stock, and I hope that Sir Thomas Shaughnessy will long be spared to manage it, and that the road will continue to prosper."

SIR THOMAS G. SHAUGHNESSY, K.C.V.O.
President Canadian Pacific Railway Co.

The President of the Board of Trade in rising to propose the toast of the evening expressed his great pleasure at Sir Thomas Shaughnessy having consented to accept such an honor at their hands, although averse to such public appearances. He had appreciated that the opening of the Sudbury line was an event of great importance to Toronto, and to this section of Ontario, and well worthy to be marked in any possible way. They could only guess of what importance the line would be; perhaps Sir Thomas would hazard a prophecy during the evening. Mr. Clarke then spoke of the advantages to be gained by the reduction in distance to the West, and said the building of the new line had been unique in one particular, in that it was built without a dollar of bonus from municipality, local or Dominion Government. It had been financed by the company, and its operation by the same company was a guarantee that it would be such as they desired. If anyone was in doubt, let him travel by any of its lines of railway, or steamers, or stay at its hotels, and he would find nothing but compliments for the management and efficiency of the C.P.R. This was a matter of national pride, although people were liable to be a little remiss in giving credit for the magnificent development of the great transcontinental system. Behind it there had been a master mind that inaugurated it, and a genius that guided it, and most largely it had been the guest of the evening that had made the road what it was. He had other qualities besides ability, and was universally admired for his breadth of view and his fair-minded attitude in all things. This was evidenced by the fact that there was none of his 70,000 employes but would be willing to have Sir Thomas as sole arbitrator of all disputes. He was also possessed of a high sense of honor, and of sterling integrity, as was demonstrated by the fact that wherever the C.P.R. was known, its management was synonymous with honesty. In these days of graft, it was refreshing to look to the C.P.R. and see what its President had done. Every subsidiary company paid into the general treasury every dollar that it earned, and there was none who could say that any of the funds had been misapplied. It was a thing to be proud of that the greatest corporation in Canada and the greatest railway company in the world was under a management that was absolutely honest and unquestioned. The saying that honesty was its own reward was never better exemplified, for Sir Thomas had only to make his requests known in the money markets to have them granted. It was to his credit that he had had, during the tight money period, funds lying in the banks that they were able to loan to business men. The President closed with saying that he always thought men should be honored during their lifetime, but he was safe in saying that there would be no brighter name in the history of Canada than that of Sir Thomas Shaughnessy.

Sir Thomas Shaughnessy, who was received with a tremendous ovation, the audience rising and cheering for several minutes,

Galena-Signal Oil Company,

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Sole manufacturers of the celebrated GALENA COACH, ENGINE and CAR OILS, and SIBLEY'S PERFECTION VALVE and SIGNAL OILS.

GUARANTEE COST per thousand miles for from one to five years, when conditions warrant it.

Maintain EXPERT DEPARTMENT, which is an organization of skilled railway mechanics of wide and varied experience. Services of Experts furnished free of charge to patrons interested in the economical use of oils.

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Is pure water white in color; high fire test; low cold test, and splendid gravity.

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CHARLES MILLER,

PRESIDENT.

humorously referred to the fact that it was just 26 years ago when certain Ontario newspapers, which at that time were not in accord with the policy or methods of the newly-organized C.P.R., and which found a good deal of fault with the importation of men trained in the technical features of railway work, were publishing articles to the effect that "another Yankee O'Shaughnessy" had been brought in by the C.P.R. But the people of Canada refused to believe that an O'Shaughnessy could be a Yankee. "Now," continued Sir Thomas, "just 26 years after, I have the temerity to come here, supported by my friends Sir Sandford Fleming, Senator Forget, and Messrs. Matthews and Osler, my colleagues in the company, to meet and join you good citizens of Toronto in celebrating the completion of a new link forged by the C.P.R., which practically places Toronto on our main line.

"In view of the occasion and of the kind words used by the Lieutenant-Governor and by your President, it may not be out of place to say that during these entire 26 years in which I have been connected with the company, I have received nothing but the most cordial support, the greatest possible friendship, the greatest possible consideration and encouragement from my fellow-Canadian citizens. During so long a period and with so varied interests it would be impossible that everyone should agree with our policy at all times, but I can say this to-day, that, no matter what may have been the outcome of our disputes, I cannot point to a single indication of resentment, and I certainly carry none.

"As the subject has been raised I think it is fitting that I should say to-night what are the facts with regard to the original construction of the C.P.R., because I do not believe that to-day the actual circumstances are understood even by Canadians. The original syndicate was composed of George Stephen, Donald A. Smith, J. J. Hill, Duncan McIntyre, R. B. Angus, with J. H. Kennedy associated with them. Messrs. Stephen, Smith, and in a smaller way R. B. Angus, had made their fortunes with the rehabilitation of the old St. Paul and Pacific, afterwards the St. Paul, Minneapolis and Manitoba Railway, and from that they had realized fortunes which even to-day would be considered vast. By reason of this they were in a position in 1881 to form the syndicate which afterwards became the Canadian Pacific Railway Co. That is where the money came from. The work was carried on, the company organized, and the stock sold on a basis to realize 45 cents on the dollar on an average, including the original subscription. Not one of these men realized one single dollar from his connection with the C.P.R., until in recent years Lord Strathcona, who had kept some of his stock, secured his benefit of the increase in value. But in 1895 any gentleman in this room could have bought C.P.R. stock on a lower basis than the original founders received it away back in 1882, when no one had any faith in the company. The great genius of the company, the man who, beyond all others, was responsible for its successful completion, was George Stephen, now Lord Mount Stephen. He was the bold man, the man of originality and resource, while Strathcona was the strong and faithful second, always ready to follow Stephen."

Proceeding, Sir Thomas said it was a peculiar source of gratification to him that it could be said of the C.P.R., as the President had just stated, that it had been an honest enterprise. He had never made a statement to his directors and shareholders with greater satisfaction than when, at their last annual meeting he had told them that every dollar of outstanding securities of any sort, excepting the original capital stock, had been sold at not less than its face value. "And," said Sir Thomas, "I have this proud boast to make, that in the 26 years that we have been in operation, notwithstanding the hundreds of millions of dollars which have been handled by many thousands of employes, the sum total of defalcations which have occurred would not amount to $100,000.

"The completion of this Toronto-Sudbury line marks an important epoch in the history of Toronto, because it not only practically places this city on the main line of the C.P.R., but brings it in closer touch with the nickel districts of Sudbury, with the industrial activities at Sault Ste. Marie, with Winnipeg and all that vast empire of the west upon which we all rely so much for our future greatness; but besides this it opens up a by no means unimportant section of Ontario hitherto served by no transportation line. It has been a hard and almost heartbreaking job. We intended from the first to make it a high-class line and made liberal estimates, but owing to engineering difficulties these have been largely exceeded, but you will agree with me that nothing is too good for Toronto.

"The connection of the C.P.R. with Toronto was established in 1884 by the construction of the Ontario and Quebec Railway from Toronto to Carleton Junction. Originally this road was 381 miles from Montreal via Ottawa, subsequently reduced to 338 miles by the construction of the Smith's Falls cut-off.

"It might be well here to refer to an old Toronto citizen whom I never knew personally, but who was a great factor in connection with that Ontario and Quebec system—the late George Laidlaw. Mr. Laidlaw devoted himself to the Credit Valley and Toronto, Grey and Bruce railways and other similar enterprises, never with profit to himself. But finally by utilizing the Credit Valley as a nucleus, and securing the necessary financial assistance, the Ontario and Quebec Railway was organized. These various lines were consolidated and the line from Toronto to Carleton Junction was built without one single penny of Government subvention, at a time when such assistance was thought to be an absolute necessity for railway construction. So George Laidlaw should always be gratefully remembered by the people of Toronto in connection with the work of this railway.

"At the time the Ontario & Quebec Railway section was completed Toronto had a population of 105,000, and its assessment was $66,000,000. To-day you have a population of about 300,000 and your assessment roll is nearly $206,000,000, a record of which I am sure very few cities of this continent can boast. I would not have you imagine that I attribute all this great growth of population and wealth to the connection formed at that time, but I am sure that I am justified in saying it was no small factor in securing these results. The magnificent strides of Toronto and of the other cities and towns of Ontario, and, indeed, of every section of eastern Canada, are due beyond any question of doubt to the opening up by the C.P.R. of that vast empire west of Lake Superior, which has brought you so much new trade, and which has given so much additional occupation to your people. Think of what you are sending to that country—groceries, provisions, implements, bicycles, machinery, stoves, pianos, books and merchandise of every possible description, which are being sent from your stores, factories and laboratories. It is by these means that Toronto's wealth and population were built up. It is true that the opening up of the west caused something of an emigration from Ontario to the west, and a temporary falling off in the value of farm lands, but any loss suffered in that was a mere bagatelle compared with the enormous advantages you have gained from the other causes I have mentioned.

"It is not necessary to refer here to what has taken place in the territory west of Lake Superior during the last few years; the growth of population and extent of lands which have been brought under cultivation in Manitoba, Saskatchewan and Alberta. That is an open book which has been read by every Canadian I do not propose to resort to anything in the nature of a statistical forecast. But we all know that given reasonable weather—and it looks as though we were going to have it—the crop of that country this year should produce at least 100,000,000 bushels of wheat. And this with the proceeds of their cattle, dairy industry and other produce can give you some estimate of the enormous purchasing power west of Lake Superior; and you people in Toronto will profit by every additional dollar of purchasing power they possess, provided that we Canadians are true to ourselves and realize that we must do whatever is in our power to strengthen the ties between that country and eastern Canada, so as to make the Canadian west an essential portion of the Dominion.

"We are all too apt to think only of the prairie country in connection with agriculture, but in British Columbia the fruit industry means a great deal for Canada. This year alone I am informed that no less than 17,000 acres of orchards have become productive, and this new yield will bring a return of no less than $5,000,000. This will mean again, an important addition to the purchasing powers of the farmers of the prairie country, while the mines and lumber industry will be given increased activity, and will come to you for their supplies; so that from every side you receive advantage from the growth of that western territory.

"With a good harvest, as I hope we shall have this year, we are sure to forget this financial stringency which has so much troubled my friend Mr. Wilkie and others. But I earnestly trust that while we forget these disagreeable days and the trials that everybody connected with financial affairs was put to, we shall not forget the lesson of that period—we shall not forget that a boom, if it be an ephemeral boom, must have serious results.

"I have referred to the practically ascertained results of this year's operations in the Northwest. We know that next year, with similar conditions, we shall have still greater improvement. But is there any gentleman in this room with the requisite temerity to make a forecast as to the conditions ten years hence? Can anyone place a limit upon the possibilities of Manitoba, Saskatchewan, Alberta and British Columbia—I would not say within the next quarter of a century—that is too long—but within the next ten years? I think I know the western country as well as most people. I have watched it as carefully as any and I would hesitate very much indeed to prophesy upon its future possibilities.

"But while we are giving attention to our agricultural interests and encouraging development of our farms and our fruit lands and our mining and lumbering opertions, we have other things to do in Canada which we must carry out if we are properly to fulfil our destiny. We have our internal waterways. We must endeavor to shorten the distance between the Georgian Bay and the seaboard, and improve the routes so as to make traffic cheaper. We must amplify and improve our ocean ports so as to give cheaper handling of traffic there. We must see that our St. Lawrence navigation and the approaches to our Atlantic seaboard are made as reliable and safe as modern methods can make them. By doing

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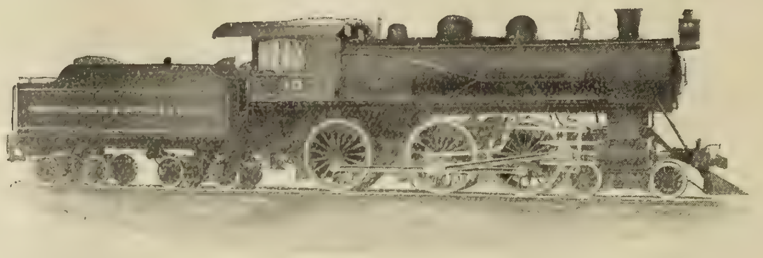

Ten-wheel Type Passenger Locomotive, built for Toronto, Hamilton & Buffalo Railway. Total weight of engine, 183,240 pounds. Weight on driving wheels, 139,675 pounds; diameter of driving wheels, 73 inches. Boiler pressure, 200 pounds. Size of cylinders, 20 x 26 inches. Maximum tractive power, 24,200 pounds.

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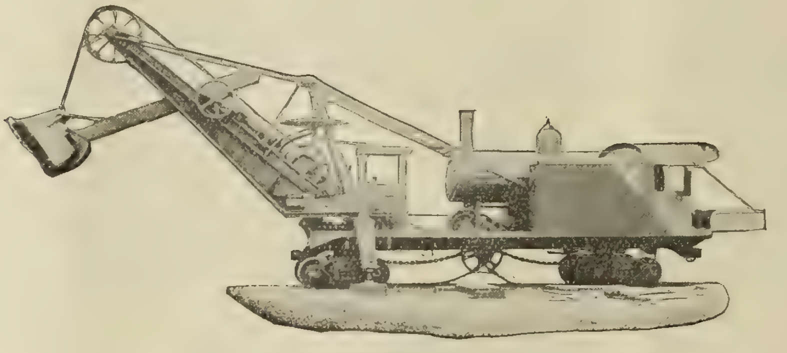

Great weight in a steam shovel makes it cumbersome and difficult to hold up on temporary rails and soft ground. The Atlantic Steam Shovel is of moderate weight, simple in design, and has few and strong parts that will not break or get out of order.

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this we shall be encouraging shipping to our ports, and by bringing additional ships we shall be bringing what we want most—people from the various countries of Europe to occupy our vacant lands. Year by year the requisite work should be done without an attempt at unwise economy, but efficiently and intelligently, so that we may bring to our own country and commercial centres all the business of the west that belongs to us, and send back our merchandise over the same routes, and handle through our own national termini all the imports and exports of this country.

"The C.P.R. has spent many years and many millions of dollars in carrying out its own plans with this purpose in view. The original three vessels that we had on the lakes have grown to a fleet of 70 on the Atlantic and Pacific Oceans and our internal waterways, so that the red and white house flag of our company is now met on the waters all the way from Hong Kong to London and Antwerp. But we have not reached a finality by any means. We should adopt every improvement and not hesitate in any expenditure necessary for the safeguarding of Canadian traffic that may be undertaken by the Government for the protection or improvement of our waterways. In this connection it may not be uninteresting to mention a report I have just received giving the passengers carried by various vessels from Liverpool across the Atlantic during the last week in May. These show in first-class passengers the Mauretania 144, Baltic 116, Caronia 135, Empress of Britain 153. In second-class passengers, the Mauretania 165, Baltic 128, Caronia 155, Empress of Britain 453, and in the third-class, which means real settlers, the figures are even more impressive: Mauretania 343, Baltic 587, Caronia 407, Empress of Britain 893. So you see that such little progress as we have made in improving the character of our vessels on the Atlantic is commencing to bring results. I do not believe in Mauretanias for us at the present time. They cost too much. The Mauretania cost nearly four times as much as the Empress of Britain, and nearly three times as much to operate her. It takes too much sentiment and too much Government subventions to operate such boats. There is too much sentiment in it. I like a little commerce myself." With reference to the all-red route, however, Sir Thomas said that after the matter had been thoroughly threshed out, and after further investigation by those who had been discussing the subject, some plan would be reached for an improved service which would not only bring additional immigrants and tourists to Canada, but would make the Dominion a still more important and popular route on the highway around the world.

"There is," continued Sir Thomas, "one other subject that I cannot help referring to. We are finding our population continually being increased by immigration from Europe and the United States. These settlers coming here have naturally not the same national sentiments as we have, but we want their co-operation and countenance in carrying out the great works before us for the still greater advancement of our country. The question is how to secure that co-operation. If after he has been here a little while the settler from the United States finds that he can buy his agricultural implements and other supplies to as good advantage there as in Canada, he will naturally do so, and the trend of trade and all social intercourse will thus become northward and southward, and in the same way foreigners from Europe will follow the example of their neighbors, and you can all see what the result of such a condition of affairs would be in the course of a few years. This is something which we must try earnestly to avoid. We must establish such relations between the merchants and manufacturers of the east, and the merchants and consumers of western Canada as will make the trend of traffic and social intercourse in Canada east and west. If we succeed in doing that we shall not only make these strangers, these colonists who have come here to build up homes for themselves and their families, good Canadian citizens, but shall be able to make them strong advocates of every policy calculated to advance the material interests of the country, and bring the various provinces into closer connection and thus more firmly establish the original idea and intention of confederation. How are we going to do this? Without talking as an expert, we must rely upon two things: first, a strong and well-thought-out transportation policy. By that I do not mean that we should deny people the right to build railways north and south. That would create dissatisfaction, and we do not want that. Let who will build railways from the International boundary northward into the western provinces, or westward through them if they wish them. But, let the men in charge of the transportation interests of Canada devote themselves to such an improvement of their properties as will enable them to carry traffic more cheaply, if possible, than it can be carried in any other country. The C.P.R. has been doing that. Since 1902 our system has spent $36,000,000 for additions to its property, and $90,000,000 for additional operating facilities—that is no small record for less than six years.

"But besides this transportation policy we should have a wise, prudent and statesmanlike tariff policy; not with a view to enriching the manufacturer or making the goods more expensive to the consumer. That, I think, can be regulated. I do not see any reason why there should not be a trade commission as well as a railway commission. But the work should be done so as to definitely and beyond any question fix the channels of Canadian trade eastward and westward.

"There is a tradition, an unwritten law, that a man in my position should not talk politics. I have great respect for traditions and would not wish to be misunderstood or construed as saying anything of a political character. To my mind, neither the transportation policy nor the trade policy of this country involves one single element of partisanship. On the contrary, every loyal citizen of Canada from New Brunswick to the Pacific, every British subject who wishes to see this country occupy the place she should in this fabric of empire, approximating the position of Great Britain herself, must agree with me that these subjects cannot receive too serious and impartial consideration.

"I find it difficult to thank you members of the Board of Trade and citizens of Toronto for this magnificent reception to-night, and for the complimentary terms with which you proposed the health of the company, of which I am President, and of myself. I do not know that I can say anything to you here to encourage the belief that the C.P.R. will in future be a greater factor in the progress and prosperity of Toronto than in the past. Probably you do not feel about the past as much as I do. You may not realize as much as I do the factor the C.P.R. has been. But I can promise you this without question or reservation; that everything that can be done properly and on business lines to bring Toronto to a still more prominent position in the business situation of the country than she occupies at the present time, the C.P.R. will do. We appreciate the loyalty with which you have supported us with your business, even at times when we did not agree upon all questions. We appreciate the importance of your position here in Ontario as the centre of a magnificent agricultural district. We are building some few lines, not very important, 30 miles here, 5 miles there, and 80 miles in another direction, to bring other sections into touch with Toronto, and no doubt that will go on, probably with some degree of acceleration, during the next few years. And I trust that when we meet here again after the completion of some other important railway connection the same good-fellowship and kind feelings will exist between the people of Toronto and the C.P.R. that I find here to-night."

The toasts of the Province of Ontario, replied to by Hon. F. Cochrane; Toronto, replied to by Mayor Oliver, and Canada, replied to by W. F. Cockshutt, M.P., elicited capital speeches, containing eloquent tributes to the C.P.R. and its President.

◆

The Late Sir Robert Reid.

Sir Robert G. Reid, President Reid Newfoundland Co., director of the C.P.R., and connected with other transportation and industrial interests in Canada and Newfoundland, died in Montreal, June 3, from pneumonia. He was born at Coupar Angus, Perthshire, Scotland, in 1842, and after spending five years in Australia, came to America in 1871, since which time he has been actively engaged in railway construction in the United States, Canada and Newfoundland. Among the works he carried out were the following: 1871, International bridge across the Niagara River at Buffalo, N.Y.; 1874, bridge construction between Montreal and Ottawa on the Montreal, Quebec and Ottawa Ry., now part of the C.P.R.; 1880, bridge across the Colorado River at Austin, Texas; and all the iron and masonry bridges on the first 250 miles of the Southern Pacific Ry. west of San Antonio, Tex.; 1882, the International bridge across the Rio Grande River, Texas, and the railway bridge across the Delaware River at Water Gap, Pa.; 1883, section of the C.P.R. north of Lake Superior, including a tunnel through solid rock 450 ft. long; and permanent and temporary bridges on 250 miles of the C.P.R. east of Port Arthur, Ont.; 1886, bridge over the St. Lawrence at Lachine, Que., for the C.P.R.; 1887, International bridge across the St. Mary's River at Sault Ste. Marie, Ont., for C.P.R., and allied interests; and a section of 86 miles of the C.P.R. branch from Sudbury to Sault Ste. Marie, Ont.; 1889-90, section of the Intercolonial Ry. in Nova Scotia, 45 miles; and the bridge across the Grand Narrows in Cape Breton. His connection with Newfoundland commenced in 1890, when he took a contract from the Colonial Government to build the Hall's Bay Ry., 260 miles, completing the same in 1893, following it up with the construction of the Western Ry., commencing at the terminus of Hall's Bay line and extending to Port-au-Basque on the west coast of the island, a distance of 250 miles. This work was accomplished in October, 1897 Under the contract, Mr. Reid had the right to operate the whole road for a term of ten years, commencing September, 1893. The road was at once opened for passenger and freight traffic between St. John's and the west coast, connecting by steamer with the Canadian mainland, other steamship lines being operated from St. John's, along the Newfoundland and Labrador coasts. In connection with the steamships he owned the graving dock at St. John's. Mr. Reid was in partnership with his sons, the firm name being R. G. Reid and Sons. In June, 1896, they applied to the Newfoundland Legislature for a charter for the construction of an electric street railway in the city of St. John's, which they constructed and operated. The contracts between Mr. Reid and the Newfoundland Government were revised in 1902, and several

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arbitrations to adjust matters have been held, the Reid Newfoundland Co., which was formed in 1903, to take over Mr. Reid's various interests, being successful in each instance. He was elected an Associate of the Canadian Society of Engineers, 1887, and was made a Knight Bachelor in 1907.

The funeral service, June 8, was attended by Sir W. Van Horne, Chairman of the Board, C.P.R.; Sir T. G. Shaughnessy, President, C.P.R.; Justice McLaren, Toronto, who had been for a number of years general counsel to Sir R. G., then Mr. Reid. The body was subsequently cremated at the Mount Royal Crematory.

The directors of the C.P.R., at their monthly meeting, June 8, passed a resolution expressing their regret at Sir Robt. Reid's death, and placing on record their appreciation of his services, and their sympathy with Lady Reid and family.

Fredericton Freight Rates.

In our last issue we published the Board of Railway Commissioners' order 4682 respecting freight rates to Fredericton, N.B. Following is Chief Commissioner Mabee's judgment, which was concurred in by Deputy Chief Commissioner Bernier. The Board of Trade of the City of Fredericton, N.B., complains against the C.P.R. Co. and the G.T.R. Co. of discrimination in freight rates against Fredericton consignees upon merchandise shipped from points in Canada west of Montreal. For many years Fredericton enjoyed the same rates from these western points that were accorded to St. John consignees, but some three years ago (jointly with the Intercolonial in the case of the G.T.R.) the rates to Fredericton were raised from points west of Montreal from 2½ to 8c. per 100 lbs. above the rates from the same points to St. John. The joint tariff was approved by the Intercolonial Ry., whose line the G.T.R. has to use to reach Fredericton. The C.P.R. Co. reaches that city by its own line.

Much evidence was given upon the hearing to the effect that the rail and ocean rates to St. John via Boston or Portland placed that city in a position that the railways were compelled to give consignees there a better rate than Fredericton consignees were entitled to. The right also of the C.P.R. Co. to regard its branch line service from Fredericton Jct. to Fredericton in fixing rates to the latter city was contended for; but, in my view, this case must be disposed of upon equitable doctrines, quite apart from either of the above considerations.

In the first place, from 1893 to Aug., 1904, the rates upon this traffic to Fredericton and St. John were the same. The change was brought about in the latter year, and could only have been made effective by the G.T.R. with the aid of the I.C.R. The consent of the latter railway to the increase was given under a misapprehension, as sworn to by its General Traffic Manager, E. Tiffin, and as clearly appears from the correspondence that passed between the railways at that time. Mr. Tiffin says—and he had previously been the C.P.R. General Freight Agent at St. John—in his opinion there is no justification for the higher rates from the points in question to Fredericton, and as far back as Oct., 1904, he was protesting against the agreement that had been made between the C.P.R. Co. and the G.T.R. Co. whereby the increase was made possible; and in a letter from the Freight Traffic Manager of the G.T.R. to Mr. Tiffin, Oct. 8, 1904, the following passage occurs:

"In fact our freight people held and still hold the impression that your representatives favored the advance basis, so that if there is anything wrong, it has been through a misapprehension. I quite agree with you that Fredericton ought not to be any higher than St. John, and we will take it up next week with the C.P.R. for the purpose of endeavoring to get the matter adjusted in line with your wishes."

The G.T.R. Freight Traffic Manager was not called upon at the hearing to vary or explain the letter, and it is fair to assume that it was an honest expression of his opinion at the time; and nothing was disclosed that could detract from the weight to be attached to the statement.

It is clear that, although the consent of the I.C.R. was obtained to the advance, that railway afterwards protested that its consent had been obtained upon a misunderstanding, not only from the above extract from the G.T.R. Freight Traffic Manager's letter, but, on Oct. 24, 1904, Mr. Tiffin wrote a letter to W. R. MacInnes, Freight Traffic Manager of the C.P.R., in which he makes the following statement:

"We have protested, both to your company and the G.T.R., against the advance, and still protest, in view of the fact that we consider Fredericton is being unfairly dealt with."

In a telegram of Oct. 28, 1904, the G.T.R. Freight Traffic Manager, Mr. Tiffin, stated that the advance could only have the effect of crippling Fredericton as a distributing centre.

As an illustration of the working of the agreement entered into by the G.T.R. with the C.P.R. in this matter, the rate from, say, Toronto is 64c. per 100 lbs. for first-class freight to all stations along the Fredericton section of the I.C.R. down to Penniac, which point is only five miles from Marysville, seven from Gibson, and eight from Fredericton, while the rate from Toronto to Marysville, Gibson, and Fredericton, through Penniac, upon the same class of freight, is 72c. per 100 lbs.

I have no hesitation in holding that the agreement was entered into by the I.C.R. under a misapprehension, and also that when entered into by the G.T.R. Co. its Freight Traffic Manager well knew that the result would be a discrimination against Fredericton. An order should go absolving both the I.C.R. and the G.T.R. from the agreement, and directing the G.T.R. Co. to restore to Fredericton the St. John rates upon all traffic originating west of Montreal.

Accident Investigations.—The Secretary of the Board of Railway Commissioners has issued the following circular: "In regard to the payment of witnesses required to attend before the Board's inspectors, the Board has ruled that all such witnesses must be paid witness fees upon the scale provided by the Exchequer Court (see sec. 65 of the Railway Act), that each inspector must report to the Board with his report of the investigation, the names, residences, miles travelled to the investigation, time lost in travelling to, remaining at, and returning from the place of investigation, and amount of fees each witness is entitled to. The Board is of the opinion that it is unreasonable to ask railway employes to attend upon investigations at their own expense or that the railways should bear the loss of the men's time while absent from their duty."

The case of Marsan vs. G.T.R., which arose in the summer of 1907, in which plaintiff claimed $49 as damage alleged to have been sustained by the failure of the G.T.R. to keep to its timetable in running trains between Montreal and St. Hilaire, where plaintiff had a summer residence, has been decided in favor of the G.T.R. In delivering judgment, the Court stated that the timetables were for the guidance of the public, and they can be binding within the limits of possibility only, and that no fault nor negligence on the part of the company having been shown, the action must be dismissed.

July Birthdays.

Many happy returns of the day to—

J. H. Black, Superintendent Temiskaming and Northern Ontario Ry., North Bay, Ont., born near Smith's Falls, Ont., July 8, 1874.

M. S. Blaiklock, Engineer Maintenance of Way, G.T.R., Montreal, born at Quebec, July 19, 1859.

D. E. Blair, Assistant Superintendent Montreal St. Ry., Montreal, born at St. Thomas, Montmagny, Que., July 25, 1877.

D. C. Coleman, Superintendent C.P.R., Nelson, B.C., born at Carleton Place, Ont., July 9, 1879.

Geo. Collins, Director and Manager Central Ontario Ry., Trenton, Ont., born at Kingston, Ont., July 20, 1860.

D. D'E. Cooper, Canadian Freight Agent Lehigh Valley Rd., Toronto, born at Buffalo, N.Y., July 8, 1862.

John Corbett, General Foreign Freight Agent C.P.R., Montreal, born in Lanarkshire, Scotland, July 19, 1863.

E. J. Coyle, Assistant General Passenger Agent C.P.R., Vancouver, B.C., born at Stayner, Ont., July 23, 1870.

S. E. Dewey, chief clerk G.T.R., General Agent's Office, New York City, born at Beckenham, Kent, Eng., July 4, 1879.

J. F. Dolan, City Passenger and Ticket Agent Richelieu and Ontario Navigation Co., Montreal, born at Kingston, Ont., July 1, 1868.

J. A. Goodearle, General Manager Turbine Steamship Co., Hamilton, Ont., born at Kingston, Ont., July 4, 1867.

W. R. Haldane, District Freight Agent C.P.R., Detroit, Mich., born at Galashiels, Scotland, July 6, 1867.

J. H. Hanna, ex-Division Freight Agent G.T.R. at Hamilton, Ont., now at Calgary, Alta., born at London, Ont., July 27, 1867.

R. K. Harris, Chief Engineer Orford Mountain Ry., Kingsbury, Que., born at Maitland, Ont., July 20, 1866.

A. D. Huff, Division Freight Agent G.T.R., Ottawa, born at Chatham, Ont., July 17, 1866.

C. A. Jaques, General Manager Merchants-Montreal Line Steamers, Montreal, born there July 15, 1849.

J. P. Kavanagh, Local Manager Ogdensburg Coal and Towing Co., Montreal, born at Plattsburg, N.Y., July 17, 1862.

D. T. Lawrence, Manager National Despatch-Great Eastern Line, Boston, Mass., born at Marysville, Ohio, July 20, 1871.

J. M. Lyons, General Passenger and Ticket Agent I.C.R., Moncton, N.B., born at Halifax, N.S., July 1, 1850.

T. J. Maguire, Accountant Quebec Central Ry., Sherbrooke, Que., born at Quebec, July 31, 1860.

R. Preston, Master Mechanic C.P.R., Toronto, born there July 28, 1863.

J. E. Quick, General Baggage Agent G.T.R., Toronto, Ont., born at Richmond, Ontario Co., N.Y., July 10, 1851.

G. G. Ruel, Assistant Solicitor Canadian Northern Ry., Toronto, born at St. John, N.B., July 5, 1866.

P. E. Ryan, Secretary National Transcontinental Railway Commission, Ottawa, born there July 26, 1876.

P. W. Snider, Superintendent Atlantic Division C.P.R. Telegraphs, St. John, N.B., born in Halton Co., Ont., July 14, 1854.

Geo. Stephen, Assistant General Freight Agent Canadian Northern Ry., Winnipeg, born at Montreal, July 5, 1876.

T. Tait, Chairman Board Railway Commissioners for Victoria, Melbourne, Australia, born at Melbourne, Que., July 24, 1864.

H. T. Wilgress, Agent C.P.R. Pacific Steamship Service, Kobe, Japan, born at Lachine, Que., July 29, 1857.

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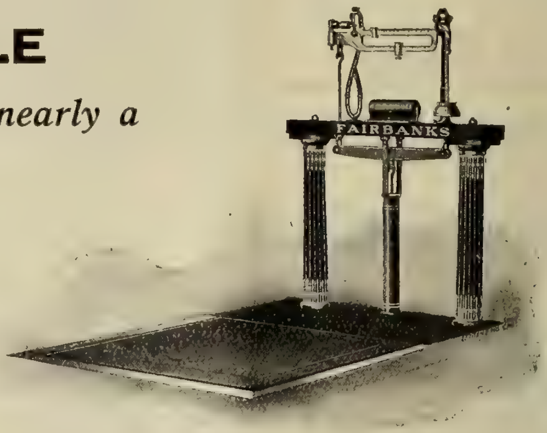

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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

4734. May 26.—Restraining C.P.R. from diverting or in any way interfering with public road crossing in Brighton parish, N.B., pending disposition of application of C.P.R. for allowance of plans for such diversion.

4735. May 14.—Authorizing W. E. Foster, President St. Martin's Ry., to prepare and issue tariffs of tolls to be charged by that railway.

4736. May 26.—Authorizing City of Peterboro, Ont., to lay water pipe under C.P.R. at George St.

4737. May 26.—Authorizing City of Peterboro, Ont., to lay water pipe under G.T.R. at George and Romaine Sts.

4738. May 26.—Authorizing C.P.R. to reconstruct bridge crossing the Bay of Brome Lake, Drummondville branch.

4739, 4740. May 26.—Authorizing the W.E. & L.S.R. Ry. to place telephone wires across M.C.R. at Leamington and Essex, Ont.

4741. May 26.—Authorizing Bell Telephone Co. to place wires across G.T.R. at Victoria Ave., St. Lambert, Que.

4742. May 26.—Authorizing C.P.R. to reconstruct bridge over Yamaska River, St. Hyacinthe, Que.

4743. May 26.—Authorizing Milestone Farmers' Mutual Telephone Co. to place wires across the C.P.R. at Milestone, Sask.

4744. May 26.—Authorizing Innerkip Rural Telephone Assn. to place wires across C.P.R. in Blandford tp., Ont.

4745. May 26.—Authorizing C.P.R. to construct a siding, south of its main line, across public road on lot 1, St. Clements parish, Man.

4746. May 7.—Authorizing W. G. Tretheway to lay water pipe under C.P.R. near Weston, Ont.

4747. May 13.—Authorizing Cornwall tp., Ont., to make improvements on drain upon and across Ottawa and New York Ry.

4748. May 15.—Authorizing Crow's Nest Pass Electric Light and Power Co. to erect wires across B.C. Southern Ry. at Michel, B.C.

4749. May 26.—Authorizing C.P.R. to construct bridge over Jack Fish River, Nipigon section, Ont.

4750. May 26.—Authorizing the C.N.Q.R. to cross National Transcontinental Ry. by a sub-crossing between the pedestals of the N.T.R. viaduct at Cap Rouge, Que.

4751. May 26.—Authorizing the C.P.R. to construct a spur line to Gallaghern, Holman & Lafrance's premises, Port Arthur, Ont.

4752. May 14.—Approving proposed deviation of New Brunswick Ry. from where it is already constructed at or near Theriault, N.B.

4753. May 7.—Authorizing Provincial Natural Gas & Fuel Co. to lay main under G.T.R. in Humberstone tp., Ont.

4754. May 12.—Requiring G.T.R. and C.P.R. to provide protection at street crossings in Lennoxville, P.Q.

4755. May 14.—Authorizing C.P.R. to construct spur lines at Calgary Jct., Alta.

4756. May 12.—Authorizing C.P.R. to reconstruct bridge crossing Richelieu St., St. John's, Que.

4757. May 14.—Authorizing Guelph & Goderich Ry. to construct its railway across highway in Wellesley tp., Ont., mileage 20.5.

4758. May 15.—Authorizing Crow's Nest Pass Electric Light & Power Co. to erect wires across B.C. Southern Ry. at Gemmill St., Fernie, B.C.

4759. May 14.—Authorizing Bell Telephone Co. to erect wires across Pere Marquette Ry. at public crossing one mile southwest of Ruthven station, Ont.

4760. May 14.—Authorizing G.T.R. to operate trains over its track where the same crosses the Oshawa Ry. Co.'s track on Simcoe St., Oshawa, Ont., without being brought to a stop.

4761. May 22.—Extending for three months from May 22, 1908, time fixed for commencement and completion of Union Station at Toronto, Ont.

4762. May 6.—Authorizing Dunnville Consolidated Telephone Co. to carry its wires across G.T.R. at Shetland St., Caledonia, Ont.

4763. May 27.—Approving location of Ontario Power Co. of Niagara Falls, Ont., from lot 22, con. 6, Crowsland tp., Ont., to lot 17, con. 5, said township, a distance of 1.97 miles.

4764. May 27.—Authorizing G.T.R. to build a spur to T. Wilson's premises, Gloucester tp., Carleton County, Ont.

4765. May 27.—Extending until June 30, 1908, time within which G.T.R. shall provide certain protection at the junction of St. Ferdinand St. and Notre Dame St. West, St. Henri, Montreal, where the G.T.R. track crosses the Montreal St. Ry.

4766. May 27.—Directing C.P.R. to place and maintain an electric bell where its line crosses Dorchester St., Quebec.

4767. May 27.—Amending order 4466 of Mar. 16, 1908, authorizing Windsor & Tecumseh Electric Ry. to cross the G.T.R. on the line of Sandwich St., Walkerville, Ont.

4768. May 27.—Authorizing Kingston, Feldspar & Mining Co. to erect telephone wire across K. & P. Ry., three miles north of Verona, Ont.

4769. May 27.—Authorizing A. L. Benn, of Long Lake, Ont., to erect telephone wires across K. & P. Ry. at Parham, Ont.

4770. May 27.—Extending until Dec. 1, 1908, time within which express companies shall file and receive approval of tariffs of tolls.

4771. May 27.—Extending until Dec. 1, 1908, time within which Bell Telephone Co. shall file and receive approval of tariffs of tolls.

4772. May 27.—Extending until Dec. 1, 1908, time within which North American Telegraph Co. shall file and receive approval of tariffs of telephone tolls.

4773. May 27.—Temporarily approving, until Dec. 1, 1908, Maritime Express Co.'s freight and money receipt.

4774. May 27.—Temporarily approving, until Dec. 1, 1908, United States & Great Northern Express Co.'s forms of contract.

4775. May 26.—Temporarily approving, until Dec. 1, 1908, Pacific Express Co.'s forms of contract.

4776. May 27.—Temporarily approving, until Dec. 1, 1908, National and American Express Co.'s forms of contract.

4777. May 26.—Temporarily approving, until Dec. 1, 1908, Dominion & Canadian Express Co.'s forms of contract.

4778. May 26.—Authorizing Bell Telephone Co. to erect wires across G.T.R. 75 yards northwest of Midland station, Ont.

4779. May 26.—Approving revised location of G.T.R. spur line to Matthew Bros.' premises along Stirling Road, Toronto, Ont.

4780. May 26.—Approving revised location of C.P.R. second track at mileage 0.0, Ignace, Ont.

4781. May 27.—Ordering G.T.R. and Wabash Ry. to interchange passenger tickets between all stations in Ontario through which the railways of both companies run passenger trains, and that each of the said companies account to the other for the revenue earned upon the tickets so interchanged.

4782. June 2.—Approving Quinze and Blanche River Ry. location through part of Guigues tp., Que., across the Quinze River, through the adjoining Indian reserve, Nedelec tp., and through Casey, Harley, and Dyment tps., Ont., to New Liskeard.

4783. June 2.—Authorizing Montreal and Southern Counties Ry. to connect its track with the G.T.R. 250 ft. from westerly end of Victoria Jubilee bridge, and on the west side of Black bridge, Common St., Montreal, and to cross the G.T.R. at Windmill Point, Montreal.

4784. April 23.—Requiring the Canadian Northern Ontario Ry., the C.P.R. and the G.T.R., to agree upon, publish and file tariffs of joint passenger tolls and provide facilities for passengers desiring to travel on the C.N.O. Ry. to and from Muskoka points.

4785. June 1.—Authorizing the Maine Central Ry. to use a certain fire extinguisher in its cars operating in Canada.

4786. June 1.—Authorizing C.P.R. to build a spur line to Booth & Shannon's premises, tp. 15, District of Algoma, Ont.

4787. May 27.—Dismissing application of J. Prittie for an order to vary or rescind order for the construction of a certain branch line from the C.P.R., in Toronto Jct., Ont.

4788. May 27.—Authorizing C.P.R. to place gates and a watchman at Winchester St., Toronto.

4789. May 19.—Authorizing Michigan Central Rd. to build a spur line to the Ontario Iron and Steel Co.'s premises, Crowland tp., Ont.

4790. June 2.—Authorizing C.P.R. to build a spur line to S. J. Fox's premises, lot 14, con. 5, tp. of Ops, Ont.

4791. June 1.—Granting leave to C.P.R. to operate trains over crossing where its railway crosses the G.T.R. on the Don Improvement, Toronto, without being brought to a stop.

4792. June 1.—Authorizing C.N.R. to operate trains over crossing where its line crosses the C.P.R. Souris branch, near Brandon, Man., without being brought to a stop.

4793. June 1.—Authorizing C.N.R. to operate trains over crossing where its line crosses the Brandon, Saskatchewan and Hudson's Bay Ry. near Brandon, Man.

4794. June 2.—Authorizing Ingersoll Telephone Co. to install its apparatus in the G.T.R. station at Ingersoll, Ont.

4795. May 18.—Ordering G.T.R. to establish and maintain gates at Bloor St. West crossing, Toronto, the same to be in operation within six months from date of order.

4796. May 20.—Ordering that the charge for switching cars by the G.T.R. and the Pere Marquette Ry. to John Campbell, Ltd., at St. Thomas, Ont., be not more than $3 a car.

4797. June 2.—Authorizing the Burgessville Telephone Co. to erect its wires across the G.T.R., near Norwich, Ont.

4798. June 2.—Approving of proposed deviation in location of the C.P.R. Co.'s Edmundston branch in Grand Falls parish, N.B.

4799. June 2.—Authorizing C.N.R. to operate trains over crossing of its line with C.P.R., in Morris, Man., without being brought to a stop.

4800. June 2.—Authorizing Chatham, Wallaceburg and Lake Erie Ry. to put into operation the half interlocking plant installed under order 4328, at crossing of its line with the Lake Erie and Detroit River Ry. at Cedar Springs, Ont., and permitting them to

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make said crossing without bringing trains to a stop.

4801. June 1.—Approving revised location of Esquimalt and Nanaimo Ry.—Wellington to Alberni Extension—mileage 87 to 90, B.C.

4802. June 1.—Authorizing C.P.R. to build spur to Oldfield, Kirby & Gardner's premises, Winnipeg, Man.

4803. June 1.—Authorizing C.P.R. to construct branch line to Nicola Valley Lumber Co.'s premises, Yale district, B.C.

4804. June 1.—Authorizing Bell Telephone Co. to place wires under the G.T.R. at Rectory St., London, Ont.

4805. June 1.—Authorizing Bell Telephone Co. to erect wires across the G.T.R. at Notre Dame St., north of Lachine Wharf station, Quebec.

4806-4810. June 1.—Authorizing Wheatley Telephone Co. to erect wires across Pere Marquette Ry., Romney tp., at five different points.

4811. May 29.—Approving location of the C.P.R. Virden-McAuley branch, mileage 0 to 5.

4812. May 27.—Approving by-law of Orford Mountain Ry., authorizing A. C. Lytle to prepare and issue tariffs of tolls to be charged on traffic carried on its railway.

4813. June 3.—Approving G.T. Pacific Ry. location from Prince Rupert, mileage 0 to 50, B.C.

4814. June 1.—Authorizing Walkerton and Lucknow Ry. to take additional lands adjoining its railway in Priceville, Ont.

4815. June 1.—Authorizing the G.T.R. to cross with its additional track on Ferguson Ave., Hamilton, Ont., two tracks of Hamilton St. Ry.

4816. May 19.—Authorizing G.T.R. to construct a branch line and two spurs therefrom to the Toronto Carpet Co. and the Malta Vita Food Co.'s premises, Toronto.

4817. June 2.—Authorizing the Essex Terminal Ry. to cross with its track the W.E. & L.S. Rapid Ry. in Sandwich West tp., Ont.

4818. May 18.—Ordering G.T.R. to protect crossing of Berlin and Waterloo St. Ry. at King St., Waterloo, Ont., by means of mechanical folding fence gates to be installed, operated and maintained by G.T.R.

4819. May 18.—Requiring G.T.R. and C.P.R. to place and keep a flagman at the Church St. crossing, Toronto.

4820. June 4.—Amending order 2413, Dec. 1, 1906, authorizing C.P.R. to cross Guelph Radial Ry.

4821. June 5.—Authorizing the Transcontinental Ry. to operate its line of railway for construction purposes only, across the C.P.R. near St. Bazile station, Que.

4822. June 5.—Approving highway crossing of G.T. Pacific Ry. in sec. 11, tp. 27, range 15, W. 2nd mer., Saskatchewan.

4823. June 9.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. Co. to operate its trains across the M.C.R. at Erie Ave., Leamington, Ont., without being brought to a stop, provided always that the trains shall be under full control and prepared to come to a stop.

4824. June 9.—Authorizing Malahide and Bayham Telephone Co-operative Association to erect wires across the C.P.R. near Eden, Ont.

4825. June 9.—Authorizing the Saraguay Electric Light and Power Co. to erect wires across the C.P.R. at Prud'homme Ave. and Cote St. Luc Road, Notre Dame de Grace municipality, Hochelaga County, Que.

4826. June 9.—Authorizing Falkirk Telephone Association to erect wires across G.T.R. at the 2nd and 4th concession roads, McGillivray tp., Ont.

4827. June 3.—Dismissing application of C.N.R. for order amending order 558, July 18, 1905, approving and sanctioning location of the C.P.R. Wolseley-Reston branch.

4828. May 26.—Authorizing C.P.R. to cross road allowance between lots 10 and 11, concession 8, Vaughan tp., Ont., by a subway.

4829. May 14.—Authorizing town of Notre Dame de Grace to construct a culvert under the G.T.R. near Turcot, Que.

4830. May 19.—Dismissing complaint of McColl Bros. & Co., Toronto, against the form of release of responsibility 258, which the C.P.R. required them to sign with respect to shipment from Toronto to Mohawk.

4831. May 13.—Approving agreement between Bell Telephone Co. and Windsor Hotel Co., Montreal.

4832. June 3.—Extending until June 15, 1908, time within which C.N.Q.R. is to complete interlocking plant directed to be provided in Order of Feb. 8, 1907, which was extended for 60 days from Nov. 30, 1907, and further extended until May 1, 1908; also to use, for construction purposes only, the crossing of its track with the C.P.R. track, Deschambault parish, Que.

4833. June 3.—Authorizing G.T.P.R. to operate its trains over the crossing where its line crosses the C.P.R. main line, parish lot 58, Portage la Prairie, Man., without being brought to a stop.

4834. June 3.—Authorizing C.N.R. to operate trains over crossing where its line crosses the C.P.R. at Headingly, Man., without being brought to a stop.

4835. June 3.—Authorizing C.P.R. to build spur to Dominion Car and Foundry Co.'s premises, near Montreal.

4836. June 3.—Authorizing Alberta Ry. and Irrigation Co. to construct a branch line of railway in sec. 6, tp. 9, r. 21, w of 4th mer., running northerly to sec. 19, tp. 9, r. 21, w. of 4th mer., a distance of 13,700 ft., in Prov. of Alberta.

4837. May 14.—Authorizing G.T.P.R. to cross the C.P.R. Pheasant Hill's branch in sec. 27, tp. 29, r. 22, w. of 2nd mer., Sask.

4838. June 3.—Dismissing application of town of Bowmanville, Ont., for order directing G.T.R. to provide better protection where its railway crosses highway directly east of station.

4839. June 2.—Amending sec. 7 of order of June 16, 1904, in re derails at crossing of Peterboro Radial Railway and G.T.R. at Lock St., Peterboro, Ont., by striking out the words "one hundred" in line three, and substituting in lieu thereof the words "seventy-five," as the distance of the derails at the crossing.

4840. June 9.—Authorizing City of Guelph, Ont., to lay water main under G.T.R. at Metcalfe St.

4841. June 16.—Authorizing C.P.R. to construct a spur to the Patrick Lumber Co.'s premises, West Kootenay, B.C.

4842. June 3.—Authorizing G.T.P.R. to operate trains over crossing where its railway crosses the C.N.R. Arizona branch near Portage la Prairie, Man.

4843. May 19.—Amending orders of Railway Committee of Privy Council, dated Nov. 22, 1892, and May 10, 1893, in re protection at crossing of Toronto Suburban Ry., G.T.R. and C.P.R., near St. Clair Ave., Toronto Jct., and directing parties thereto to contribute towards maintenance and protection of the crossings.

4844. April 24.—Authorizing G.T.R. to construct spur to the Berlin Machine Works, Hamilton, Ont.

4845. June 11.—Authorizing town of Niagara, Ont., to erect electric light wires across the M.C.R.

4846. June 11.—Authorizing Vancouver, Victoria and Eastern Ry. and Nav. Co. to construct its railway across public highways through Huntingdon townsite, B.C.

4847-4849. June 2.—Authorizing C.P.R. to construct spur lines to the Consumers' Cordage Co., Shearer, Brown & Wills, the Sherwin-Williams Co., and the Canada Sugar Refining Co.'s premises, Montreal.

Summaries of orders passed subsequently to the foregoing, will be found further on in this issue.

National Transcontinental Railway.

The Dominion Parliament has, at its current session, voted $3,750,000 on account of surveys and construction of the National Transcontinental Railway, in addition to the amounts already reported.

Replying to questions in the House of Commons, May 27, the Minister of Railways stated that upon the Eastern Division steel rails had been purchased as follows:

District A.—For delivery at Moncton, N.B., 7,794.4 tons at $35.85 per ton; for delivery at Edmundston, N.B., 8,548.4 tons at $37.60 per ton, from the Dominion Iron and Steel Co., Sydney, N.S.

District B.—For delivery at Quebec, 23,000 tons at $34 per ton; and 8,171.7 tons at $35 per ton; for delivery at Levis, 19,485.7 tons at $35 per ton, from the Dominion Iron and Steel Co., Sydney, N.S.

District D.—For delivery at the junction with the Temiskaming and Northern Ontario Ry., 21,371 tons at $40 per ton; for delivery at Port Arthur or Fort William, 32,000 tons at $34 per ton from the Algoma Steel Co., Sault Ste. Marie, Ont. For delivery at Port Arthur or Fort William, 10,000 tons at $34.50 per ton, from the Dominion Iron and Steel Co., Sydney, N.S.

The total length of the Eastern Division was 1,803.55 miles, which would require 226,731.48 tons of rails. The estimated weight of rails required for tracks in yards and sidings was 41,109 tons, making a total of 267,840 tons. The estimated cost of $63,427 per mile, as given in a recent sessional paper, included the cost of terminal yards, station houses, engine houses, turntables, water tanks, and all buildings and structures necessary or usual for the effective operation of the road, but did not include terminals at Winnipeg, shops east of Winnipeg, or terminals at Quebec or connection therewith, plans for which have not yet been made.

The Commission has appointed 19 fire wardens to look after the forests along the route of the railway in New Brunswick, and the timekeepers at the different construction camps have been appointed deputy wardens. Good progress is reported to have been made with grading in the province, and a member of the engineering staff at Moncton is quoted as saying that 10 miles of the line at that end will be completed by the end of the summer.

A plan showing the right-of-way of the line from mileage 150 to 160, from the north abutment of the Quebec Bridge easterly through the County of Kamouraska has been filed. Replying to questions in the House of Commons, the Minister of Railways recently said that the reports that part of the track near La Tuque, Que., were under water, and that as a result the route would have to be changed, were unfounded. A temporary siding at one point was under water, but no damage had been done to the road.

Another explosion of dynamite on the line north of Kenora, resulting in the loss of nine lives, is being investigated by the Chief Engineer. A previous investigation showed that the men became negligent in the handling of explosives, and instructions were issued as to the precautions to be observed.

Replying to a question in the House of Commons, the Minister of Railways recently said the medical service and attendance on

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men employed on construction were furnished by the contractors, and this service was carried on under the supervision of the Inspectors of the Department of Agriculture. The only medical officers employed by the Commissioners of the Transcontinental Ry. were: J. B. Piegay, district C, salary $80 a month; D. Handfield, district E, salary $75 a month; G. R. Johnson, district D, salary $80 a month; W. J. Taugher, district D, salary $75 a month.

Grand Trunk Pacific Ry.—The Dominion Parliament, at its current session, has voted $1,750 as remuneration to A. Brunet, Government director, and $24,500 for the inspection of the G.T. Pacific Ry.

The G.T. Pacific Ry., according to the reply of the Minister of Railways to questions in the House of Commons, May 27, has purchased 50,000 tons of steel rails from the Algoma Steel Co., Sault Ste. Marie, Ont., and 50,000 tons from the United States. For the Lake Superior branch from Fort William to Lake Superior Jct., the company had used 26,000 tons of steel rails lifted from the G.T.R., which were replaced by 26,000 tons of new rails purchased from the Dominion Iron and Steel Co.

The eastern limit of the Mountain section was fixed Nov. 21, 1907, by Collingwood Schrieber, Consulting Engineer of the Department, and B. B. Kelliher, Chief Engineer of the G.T. Pacific, as the east bank of Wolfe Creek. This point is 129 miles east of the summit of the Yellowhead Pass, and 119 miles west of Edmonton. Wolfe Creek has an elevation of 665 ft. above Edmonton, while the summit of Yellowhead Pass is 840 ft. higher than Wolfe Creek.

C. Schrieber, Consulting Engineer to the Department of Railways, left Montreal, June 15, to inspect the work in progress on the line. Track is reported to have been laid westward from Portage la Prairie for 560 miles, and it was expected that track would be laid on the 54 miles between Portage la Prairie and Winnipeg by the end of June. Tracklaying is being pushed towards Battle River, and in order to push on with the work rails and other tracklaying material are being concentrated at Edmonton, so that tracklaying may also be gone on with from that point easterly.

The G.T.P.R. is establishing a base hospital at Prince Rupert, B.C., in connection with the construction from the Pacific coast. The Minister of Railways admitted in the House of Commons recently that all supplies purchased in Eastern Canada were being taken over the G.T.R. via Chicago, and shipped via Seattle, Wash. Supplies were being purchased by the contractors in the United States and shipped via Seattle, and supplies were also being purchased in Vancouver, B.C., but reports from that city state the quantity is but small compared with what are purchased in the U.S.

Grand Trunk Pacific Branch Lines Co.—The bill granting an extension of time for the construction of a number of branch lines has been passed at the current session of the Dominion Parliament. The amendment providing that the Government take over the branch lines of the Eastern Division, N.T. Ry., which the G.T. Pacific Ry. did not wish to retain at the end of the 50 years' lease, was withdrawn. (June, pg. 415.)

The C.P.R., has announced its decision to sign the White Pass tariff agreement, in respect of which it has had some differences with the White Pass and Yukon Route for some time.

The Minister of Marine has approved of the amendment to the Quebec Harbor Commissioners' by-law governing the operation of railway traffic along the Louise embankment. The regulations heretofore in force are repealed, and new regulations have been substituted therefor.

Canadian Northern Ry. Construction.

Canadian Northern Ontario Ry.—It is stated as a result of the declaration of the Board of Railway Commissioners that the C.N.O.R. would have to pay land damages if it took certain lands in the Rosedale Valley, Toronto, to construct a drive, in return for the roadway on the east of the Don, which it is proposed shall be used for railway yards, that the project will be abandoned. The abandonment of the project by the C.N.O.R. is suggested by the proposal of the Assessment Commissioner that the Toronto City Council should itself expropriate the land and construct the drive.

In connection with the starting of a train service over the branch line to the Moose Mountain iron mines, and the line to Key Inlet, Ont., a party of U.S. capitalists, accompanied D. D. Mann, Vice-President C.N.R., over the line, June 12. It is expected that the mine will begin shipping ore early in July, by which time the dock and loading facilties at Key Inlet are expected to be completed. The members of the party, it is stated, are interested in the establishment of a smelter for the ore at Ashbridge's Bay, Toronto. None of the party would make any definite statement as to what it was intended to do, except that the whole project depended upon the state of the money market.

Winnipeg Joint Terminals.—The Canadian Northern Ry. will construct the joint terminals at Winnipeg, described in our last issue, for the C.N.R., the G.T. Pacific Ry., and the Transcontinental Ry. The general contractors for the work are P. Lyall & Sons, of Montreal, and excavations for the foundations have been started. The piling work will be done by the Raymond Concrete Pile Co., of Canada, which has successfully completed the work of putting in the piles for the C.P.R. bridge across the Belly River, at Lethbridge, Alta. The foundations will require the putting in of 1,800 piles, and the work is expected to be completed in about six weeks. The steel work will be put up by the Dominion Bridge Co., Montreal.

Canadian Northern Ry.—The work of ballasting and final completion of the extension into Regina, Sask., is expected to be done in July, and a full passenger service will be put on in August. In a recent interview, M. H. McLeod, General Manager, said the service would be through from the east to Prince Albert, and connection would also be made with the main line at Warman. Ties and other material for the strengthening and improvement of the line from Regina to Prince Albert (the old Qu'Appelle, Long Lake and Saskatchewan Ry.) are being taken in, and it is stated that the company's intention is to completely reconstruct the line, so as to permit the use of heavier rolling stock, and a better service being given. From Saskatoon, Sask., it is reported that a final agreement has been reached between the C.N.R. and the G.T. Pacific Ry. for the construction of joint terminals, and a union station at that point, but we are officially advised that no negotiations to that end have taken place. At Prince Albert the company is awaiting delivery of the rails necessary to lay the track to connect the western and central stations in the city.

The Northern Construction Co.'s grading outfit reached Tessier May 20, and started work on the line under construction towards Eagle Lake, known as the Goose Lake extension. Work on this extension was suspended in the fall of 1907, the reason given being that farmers and others were asking unreasonable compensation as land damages. A subsequent press report states that it is intended to divert the line from the original route, which was south-west by way of Zealandia, and following a direct line to Calgary. The route which it is now said will be followed will swing off westerly, touching Oliver, which is west and a little north of Zealandia, and will follow pretty closely the Eagle Creek district.

The Calgary Board of Trade passed a resolution June 8, recommending the Associated Boards of Trade at the annual meeting at Medicine Hat to pass a resolution urgently requesting the Governments of Saskatchewan and Alberta to adopt the policy of the Government guarantee of railway bonds. While the resolution is in general terms the course of the discussion showed that the line which it is particularly desired to have constructed is an extension of the C.N.R. from Regina to Calgary. The suggested route of the line is from Regina northwest through the Fairview and Cottonwood districts, to cross the Saskatchewan River near the Elbow opposite Craik, and thence in an almost straight line to Calgary. Petitions in favor of the construction of this line were originally circulated by the Regina Board of Trade.

A petition has been largely signed in northern Saskatchewan asking the Dominion Government to guarantee the bonds of the company in order to promote the construction of a line from Battleford, Sask., to Athabaska Landing, Alta. The country through which such a line would pass is said to be filling up rapidly.

Quebec Transportation Club.—The annual meeting was held June 9, the report showing a balance in hand of $93.44. The members were conveyed in a special car to the Montmorency Falls, and in the evening were entertained at a theatre party as the guests of E. A. Evans, General Manager Quebec Ry., Light and Power Co. The officers for the current year are: Honorary President, J. G. Scott, General Manager Quebec and Lake St. John Ry.; Honorary Vice-Presidents, W. Molson MacPherson, Dominion Line Steamships, E. O. Grundy, Quebec Central Ry.; President, E. A. Evans, Vice-Presidents, J. Hone, Jr., C.P.R., F. S. Stocking, Quebec Central Ry.; Honorary Secretary-Treasurer, A. H. Davis, C.P.R.; Committee, J. B. Ramsay, Dominion Line; J. S. Thom, Quebec Transportation and Forwarding Co.; G. H. Stott, G.T.R.; M. P. Connelly, R. and O.N. Co.; J. A. Everall, Quebec Ry., Light and Power Co.

Railway Taxation in Saskatchewan.—The Saskatchewan Legislature has adopted the following resolution providing for the taxation of railways in the province, on motion of the Provincial Treasurer: "Resolved that it is expedient that every railway company at present owning or operating, or which may hereafter own or operate, any line or lines of railway situated or partly situated within Saskatchewan, shall, during 1908, and annually thereafter, pay to the Crown, in the province, such part or portion of its gross earnings as may be determined by the Lieutenant-Governor-in-Council, not to exceed the following: (a) In respect of that part of the railway or branch of railway in operation for seven years or more, 3% of the gross earnings derived from the operation of such line of railway within Saskatchewan. (b) In the case of a railway in operation over five years or more and less than seven years, 1½% of such gross earnings, provided that no tax shall be payable hereunder on the gross earnings of any line of railway until such line has been in operation for five years."

The Imperial Storage and Cartage Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $40,000 and office in Toronto, to carry on the business of warehousing, storage, cartage and expressing. The provisional directors are: W. D. Earngey, E. C. Lean and T. E. McCraken, Toronto.

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Beaver Cove, B.C.—Capt. Garland and Alderman Fader, of New Westminster, B.C., are interested in the development of timber and other properties in the vicinity of Beaver Cove, Vancouver Island, where there is already a short logging railway in operation. It has been decided to construct an additional section of the railway so that logging operations may be carried on continuously, independently of the rise and fall of the water in the river.

Canada West Coal Co.—Supplementary letters patent have been issued under the Dominion Companies Act providing for the increase of the capital stock of the company from $2,000,000 to $2,400,000. (Mar., pg. 179.)

Cape Breton Railways.—The deputation of residents of Cape Breton Island which went to Ottawa to urge on the Dominion Government the necessity of further railway extension in that part of Nova Scotia, returned June 4. The deputation met the Minister of Finance and the Minister of Railways at Ottawa, and discussed the matter from all standpoints. The Ministers expressed themselves as being favorably disposed towards the proposals. Warden Levett, one of the deputation, in an interview at Sydney, said: "Under the railway law no subsidy can be given to lines that parallel each other within 20 miles. This problem is, however, capable of solution as far as the proposed line between Sydney and Louisburg is concerned. A proposition will likely be made to the Dominion Coal Co. to double-track the line between Sydney and Louisburg, the Intercolonial Ry. to have running powers and to be a common carrier for any other collieries, or any other business established along the route. I feel quite satisfied that further railway extension will in the near future be under way in Cape Breton, either by the Government undertaking the work as an extension of the Intercolonial Ry., or by a private company." ((June, pg. 401.)

Detroit River Tunnel.—The third of the sections, each 200 ft. long, of the double-tube tunnel under construction between Detroit, Mich., and Windsor, Ont., has been placed in position. A recent report stated that owing to the difficulty of obtaining a sufficient number of men to work in the air lock, the construction of the tunnel was not going on as fast as was anticipated.

The matter of the admission of materials and contractors' plant at the tunnel works into Canada free of duty, was again raised in the House of Commons June 12, when it was claimed that about $200,000 worth of materials had already been imported for use on the Canadian end of the tunnel duty free, and that not a single cent's worth of material had been purchased in Canada. (June, pg. 401.)

Eastern British Columbia Ry.—We are advised that it is intended to construct 14 miles of line this year upon this projected railway The line will start from McGillivray station on the C.P.R. Crow's Nest branch, and will run southerly along Michel Creek to some coal properties owned by D. C. Corbin, of Spokane, Wash., and his associates. Engineering parties are in the field, and construction will be started at an early date. (May, pg. 329.)

The Hill Crest Coal and Coke Co., which has its head office at Ottawa, has been registered at Edmonton, Alta., under the ordinance of the Northwest Territories respecting foreign corporations. (Feb., pg. 97.)

Intercolonial Ry.—The St. John, N.B., city Board of Public Works has acceded to the request of the Chief Engineer of the railway for permission to close the Stanley St. bridge for four weeks to facilitate its reconstruction.

The work of constructing the new shops at Moncton, N.B., is being pushed forward rapidly, and it is expected that the whole of the buildings will be ready for occupation by Sept. 1. Two of the shops—the freight car repair shops and the planing, have been completed, and the machinery is being installed. The steel work for the locomotive shop is in place, and the concrete work is being gone ahead with

The freight shed and coal shed at Bathurst, N.B., were destroyed by fire May 25, the loss being placed at $15,000. The burned buildings, it is understood, will be replaced at once.

The Mayor of Amherst, N.S., reported to the city council June 4, that a deputation from Amherst, Parrsboro, Truro and Halifax, waited on the Dominion Government at Ottawa, May 26, with reference to double-tracking the I.C.R. The deputation visited Ottawa to a considerable extent as a result of a recent statement of the Minister of Railways that in order to make Halifax an important terminus for heavy trunk traffic some escape would have to be had from the line through the Cobequid mountains, on which there are heavy gradients The deputation suggested that instead of double-tracking the present main line, the second track be constructed by a western deviation. Parting from the present route at Amherst, the proposed route goes to Amherst Point, crosses the Maccan River near its mouth, following the River Hebert to Halfway River, thence to Parrsboro, Five Islands, and so to Truro. It is claimed that the distance would be increased by only 10 or 12 miles, and that practically a level route can be found for the whole distance, so that maximum grades would not exceed the G.T.Pacific standard of 0.4%. The proposed route would traverse an important district not now in possession of railway facilities. After the case for the localities had been presented, the Premier stated that it was his desire, as well as that of his colleagues, that the work be done, and that if the Minister could arrange for the money the work would be taken in hand at an early date.

The House of Commons has voted the following sums on account of improvements to the Intercolonial Ry., at the current session of Parliament, in addition to the amounts already reported.:

Original construction	$ 125.00
Increased accommodation, etc	21,125.00
Strengthening bridges	23,750.00
To increase water supply	3,275.00
New turntables	2,062.50
Towards double-tracking	25,000.00
Halifax, increased accommodation	62,500.00
Windsor, improvements	312.50
Sydney Mines, extension to	2,437.50
North Sydney, improvements	500.00
Sydney, increased accommodation	1,750.00
Mulgrave, improvements	5,850.00
Pirate Harbor, water service	625.00
Antigonish, increased accommodation	562.50
New Glasgow, increased accommodation	1,250.00
Stellarton, increased accommodation	812.50
Pictou, increased accommodation	1,075.00
Truro, increased accommodation	13,125.00
Springhill Junction, increased accommodation	362.50
Amherst, improvements	5,875.00
Sackville, N.S., improvements	3,375.00
St. John, increased accommodation	15,000.00
Loggieville, improvements	1,868.75
Campbellton, improvements	3,125.00
Newcastle, improvements	4,750.00
Dalhousie, extension of wharf	375.00
To put railway between Indiantown and Blackville into condition for operation	10,000.00
St. Flavie, increased accommodation	2,562.50
Riviere du Loup, engine house, etc	14,437.50
Levis, increased accommodation	375.00
Levis, siding at Princess pier	500.00
Chaudiere Junction, engine house, etc	6,925.00
Drummondville, improvements	750.00
St. Rosalie, improvements	10,737.50

In connection with a vote for $28,000 for surveys and inspections upon the I.C.R., the Minister of Railways said in the House of Commons, June 10, no survey had been made of the proposed new route for the line to do away with the gradient over the Cobequid Mountains in Nova Scotia. The question, however, would have to be taken up shortly. In a short space of time the Canadian Northern Ry. and the Transcontinental Railway would be bringing traffic from the west to Moncton, and the need of a double track on the I.C.R. from Moncton to Halifax, and probably to St. John also, would become imperative. It was not proposed to do any further double-tracking on the line beyond Windsor Junction this year, but the whole question of improving the route to Halifax and St. John would have to be considered, and would be given careful attention by the Government. (June, pg. 403.)

International Ry. of New Brunswick.—We are advised that 40 miles of track have been laid from the Campbellton end of the line, and that at June 1 there were 600 men engaged in grading the line from track-end towards the International boundary. It was expected to have an additional 600 men at work during June, and by carrying on operations from both ends, it is hoped to have the grading completed this season. (June, pg. 403, and Dec., 1907, pg. 889.)

Little Nation Ry.—We are officially advised that the directors have approved of the plans of the first section of the line, and that the sanction of the Quebec Government is being asked for the same. H. Lefebvre, Chief Engineer, who has been appointed General Manager, has been authorized by the directors to arrange for the purchase of the right-of-way, and to do all that is necessary preparatory to beginning construction. (June, pg. 403.)

New Brunswick Coal and Ry. Co.—In connection with the work of repairing the old Central Ry., amalgamated with the N.B. Coal and Ry. Co., which was undertaken by the Commission appointed by the New Brunswick Government, the recently appointed Commissioners, have reported that between 15 and 20 miles of the line between Chipman and Norton is in very bad shape. Some parts have recently been covered with water, and trains have been running off the track almost daily. The Commissioners state they have not sufficient funds at their disposal out of the ordinary revenues to make the needed repairs, and suggest that a grant be made for this purpose, say $1,000 a mile for 12 miles. It is understood that steps will be taken by the Government to have the necessary work done at once. (Nov., 1907, pg. 829.)

Prince Edward Island Ry.—Tenders are under consideration for the erection of a brick power house and chimney at Charlottetown, P.E.I.

The following amounts have been voted at the current session of the Dominion Parliament on account of improvements in addition to those already reported:

Charlottetown, increased accommodation.	$32,500.00
Souris, extension of wharf	2,312.50
Spur line and ballast pit	3,750.00
Steel rails	1,250.00
Increased accommodation and facilities along the line	818.75

(June, pg. 405.)

Quebec Bridge and Ry. Co.—The work of removing the wreck of the collapsed portion of the Quebec Bridge at Chaudiere, Que., has been in progress since June 1. The work is being done by the contractor for the construction of the bridge. In the House of Commons, June 11, the Premier briefly intimated that before the end of the session the Government would have some legislation to propose in regard to the bridge. What the proposal would be was not indicated, but it is generally understood that the bridge will be constructed as a Government work.

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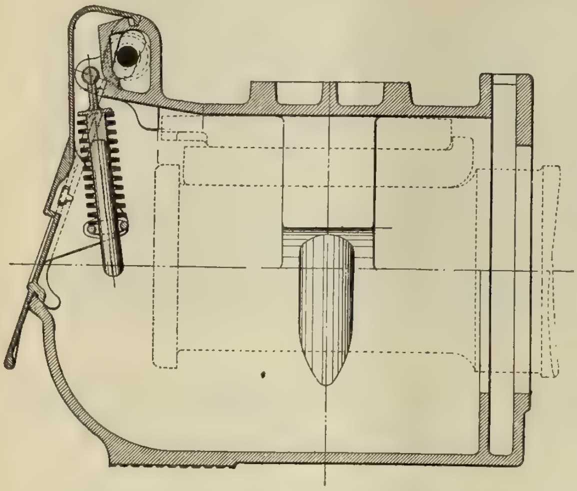

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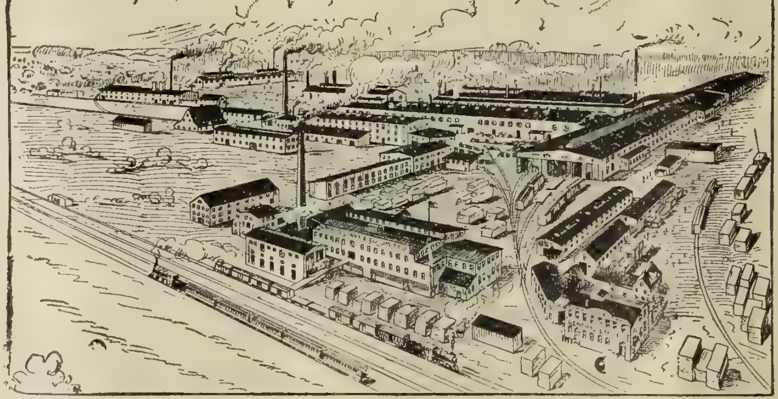

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The House of Commons Committee appointed to investigate the affairs of the Bridge Co., appointed A. K. McLean as its chairman, and began the hearing of evidence June 2, when U. Barthe, the Secretary, was examined. An examination of a number of the company's books was made, and Mr. Barthe gave information as to the various entries. In giving evidence June 9 as to the subscribers to the $200,000 stock to be paid for before the Government guarantee bond was given he mentioned the following: H. A. Allan, $25,000; Hon. J. Sharples, $50,000; G.T.R., $25,000; M. P. Davis, $94,900. To Mr. Monk he gave details of payments to the directors of the company, which in 1901 amounted to $10,000, in 1902 to $5,000, and in 1906 to a like amount, an aggregate of $20,000. These amounts were first voted at meetings of the shareholders. In 1904 the directors voted themselves $5,000, having a letter from Hon. Mr. Taschereau, their legal adviser, that this was within their rights. Mr. Barthe stated that debentures amounting to $400,000 were taken up by M. P. Davis, the contractor, at 65c. on the dollar. These were taken up again by a subsequent issue of bonds, which were guaranteed by the Government. Whether the contractor or the company lost the $188,000 of discount the witness did not know. In the course of further examination Mr. Barthe stated that since the disaster of Sept. last nothing had been done in the direction of resuming work. (Mar., pg. 183.)

Quinze and Blanche River Ry.—We are advised that construction will be started at an early date upon the construction of a section of this line. Construction will commence at the foot of Quinze rapids. Rails and other construction material has been taken in, and the plans for the route from the first Chute of Quinze River, by Devil's Eddy, have been approved by the Board of Railway Commissioners. The work will be done by the Bronson Co., Ottawa, and will be in charge of D. A. McNaughten.

The Q. and B.R. Ry. Co. was incorporated by the Dominion Parliament in 1907, the provisional directors named being associated with the Bronson Co. The company was authorized to construct a line from Dymond, Ont., on the Temiskaming and Northern Ontario Ry., to the mouth of the Des Quinze River, a tributary of the Ottawa River, in the Province of Quebec, and thence to the Des Quinze Lake. The undertaking of the company was declared to be one for the general advantage of Canada; it was authorized to issue $500,000 of common stock, and bonds to the amount of $20,000 a mile. It was also given power to make agreements with the C.P.R. and the Temiskaming and Northern Ontario Ry.; to operate steam and other vessels on the navigable waters reached by its line; to develop waterpowers, and in this matter to be subject to the provisions of any general act now or hereafter passed by the Legislatures of Ontario or Quebec, for the control of the transmission of electricity in any form. (June, 1907, pg. 409, and Jan., 1907, pg. 5.)

Temiskaming and Northern Ontario Ry.—J. L. Englehart, Chairman of the T. and N.O.R. Commission, returned to Toronto, June 1, from a trip over the line. He stated in an interview that track had been laid to Driftwood River, 217 miles north of North Bay, and within 35 miles of the proposed point of junction with the National Transcontinental Ry. The steel superstructure of the bridge across the river is being placed in position by the Canada Foundry Co., Toronto, which has the contract, and this work is expected to be completed early in July. The bridge has a length of 490 ft.

Tenders are under consideration for the construction of an engine house, and for alterations and additions to the station at Cobalt. It is understood that work will be commenced at once upon the construction of a siding from the station to the new dock at New Liskeard, (June, pg. 405.)

Trans-Canada Ry.—In the course of his speech upon the railway development in the country tributary to Quebec, at the dinner given to him by the public men and merchants of the district in Quebec recently, J. G. Scott said there remained still another great work to be accomplished, namely, the opening up of the James Bay country. That territory comprised an area of 70,000 square miles, abounding in spruce forests, water powers, arable lands, lignite coal and minerals, with a climate quite as good as that of the Lake St. John country. A railway from Roberval to James Bay would pass through the centre of this great territory, and would touch at half-way the valuable Chibougamo mining district. The Dominion Parliament had voted a subsidy for the construction of such a line, and the Quebec Legislature had voted aid by way of a land grant. The Trans-Canada Ry. Co. had made surveys for the line, and was ready to go on with the construction of the first section. By the time that projected line reached Hudson Bay, the necessity would have arisen for another band of steel to connect the Western prairies with the Atlantic seaboard. When that day arrives, the Trans-Canada Ry. will be extended from the James Bay country to Port Simpson, B.C. (June, pg. 407.)

Twin Tree Mines Ry.—The New Brunswick Legislature, at its recent session, passed an act reviving the act incorporating a company with this title, and authorizing it to construct a railway from the Intercolonial Ry. between Gloucester Jct. and Bathurst station to the mines, and an extension to tidewater at or near Bathurst harbor. (May, pg. 335.)

Vancouver Island and Eastern Ry.—The act incorporating a company with this title has been passed at the current session of the Dominion Parliament. The organization of the company is being proceeded with and it is expected that surveys for a portion of the lines authorized will shortly be undertaken. (April, pg. 247.)

York and Carleton Ry.—An unconfirmed press report says: "The Stanley Ry. and Mfg. Co., Ryan's Brook, N.B., are considering taking over the York and Carleton Ry., and extending it eight miles to connect with the Grand Trunk Pacific, near Napidoggan Lake, N.B."

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Typical Steel Railway Bridges.—W. Chase Thomson, M. Can. Soc. C.E., and Assistant Engineer, Dominion Bridge Co., Montreal, has supplemented his book on Bridge and Structural Design by another on the Designs of Typical Steel Railway Bridges. This is described as being an elementary course for engineering students and draughtsmen, and as having been developed from lectures given by him. The structures treated of represent the commonest type of railway bridges, and illustrate the problems which occur most frequently to the bridge designer. The first chapter deals with the specifications, and in the subsequent six chapters, designs and details are given for the following bridges: 60-ft. deck plate girder; 100-ft. deck Warren girder; 150-ft. through Pratt truss; 200-ft. through Pratt truss with curved top chord; 170-ft. swing bridge; railway viaduct. Another chapter deals with some additional types of steel railway bridges, and in the last chapter the latticing of compression members is discussed. The volume is published by the Engineering News Publishing Co., New York, and can be obtained through THE RAILWAY AND MARINE WORLD'S Book Department.

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309,900	116,100+
Nov..	957,400	689,100	268,300	215,700+
Dec..	801,100	558,400	242,700	264,900+
Jan...	578,200	462,500	115,700	226,800+
Feb..	485,600	401,900	83,700	152,400+
Mar.	625,300	453,400	171,900	136,500+
April	686,100	525,400	160,700	116.200+
	$7,683,100	$5,542,700	$2,140,400	$2,023,700+

Approximate earnings for May, $654.900, against $870,600 for May, 1907.

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C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7,010,177.40	4,439,902.25	2,570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
Dec.	6,418,576.38	4,341,386.80	2,077,189.58	188,404.76−
Jan..	4,498,560.80	3,874,569.02	623,991.78	75,664.17+
Feb..	4,129,044.09	3,771,947.48	357,096.61	264,891.51−
Mar.	5,424,931.26	4,123,901.77	1,301,029.49	944,706.73−
April	5,497,736.30	3 775,501.86	1,722,234.44	644,691.43−
	$60,435,768.52	$42,000,393.61	$18,435,374.91	$1,933,469.61−

Approximate earnings for May, $5,338,000, against $6,889,000 for May, 1907.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for April, $202,053.85; working expenses, $144,917.85; net earnings, $57,136.00; against $271,898.93, gross earnings; $194,257.02, expenses; $77,641.91, net earnings, for April, 1907. Total earnings for ten months ended April 30, $2,588,356.83; expenses, $1,922,874.03; net earnings, $665,482.80; against, $2,659,363.87, total earnings; $1,832,692.14, expenses; $826,671.73, net earnings for same period, 1906-07. Approximate earnings for May, $185,184, against $322,865 for May, 1907.

MINERAL RANGE RD.—Gross earnings for April $66,507.17; expenses, $58,322.04; net earnings, $8,185.13; against, $65,792.10, gross earnings; $51,403.34, expenses; $14,388.76, net earnings for April, 1907. Total earnings for ten months ended April 30, $674.471.87; expenses, $569,601.03; net earnings, $104,870.84; against, $645,708.72, total earnings; $485,472.62, expenses; $160,236.10, net earnings for same period, 1906-07. Approximate earnings for May, $69,119, against $78,597 for May, 1907.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for April, $812,446.33; expenses, $538,631.09; net earnings, $273,815.24; against, $1,236,428.73, gross earnings; $752,716.49, expenses; $483,712.24, net earnings for April, 1907. Total earnings for ten months ended April 30, $9,852,348.52; expenses, $6,024,445.87; net earnings, $3,827,902.65; against, $10 446,450.05, total earnings; $5,992,081.82, expenses; $4,454,368.23, net earnings for same period, 1906-07. Approximate earnings for May, $761,551, against $1,152,894, for May, 1907.

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Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G.T.R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for Apr., as compared with Apr., 1907:

GRAND TRUNK RAILWAY.

	1908	1907
Earnings	$2,320,900	$2,961,700
Expenses	1,658,600	2,006,500
Net earnings	$ 662,300	$ 955,200

CANADA ATLANTIC RAILWAY.

Earnings	$ 105,700	$ 133,670
Expenses	113,000	141,100
Deficit	$ 7,300	Def.$ 7,430

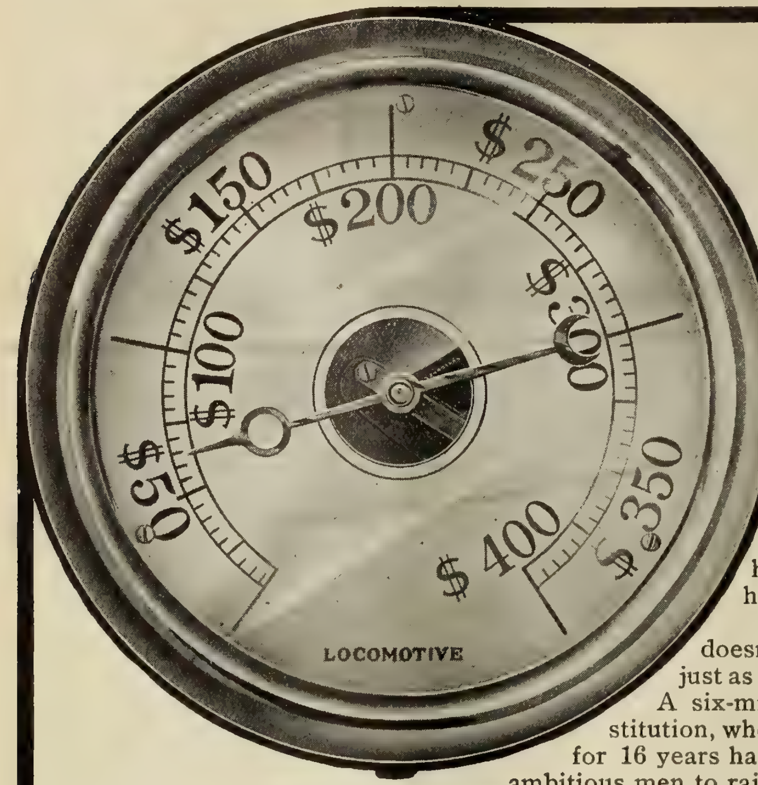
GRAND TRUNK WESTERN RAILWAY.

Earnings	$ 438,100	$ 518,400
Expenses	368,800	460,250
Net earnings	$ 69,300	$ 58,150

DETROIT, GRAND HAVEN & MILWAUKEE RY.

Earnings	$ 111,900	$ 134,100
Expenses	119,100	117,150
Deficit	$ 7,200	$ 16,950

Approximate earnings for May, $3,138,900, against $3,908,674 for May, 1907.



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Mechanical Engineer
Mechanical Draftsman
Machine Designer
Electrical Engineer
R. R. Const'n Eng.
Civil Engineer
Bridge Engineer
Chemist
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Bridge at Woodstock, N.B.—A contract is reported to have been let to Power & Brewer for the concrete substructure of the bridge about to be erected at Upper Woodstock, N.B. The cost is estimated at $125,000.

Lachine Bridge.—Work is in progress in constructing a protection for the piers of the company's bridge across the St. Lawrence River at Lachine. A number of barges are engaged in dumping loads of stone from the Caughnawaga quarry just above the piers, and in such a way as not to interfere with navigation. The object is to prevent the erosion of the piers by the swift current.

Caledonia Springs, Ont.—A press report states that the company has decided to erect a large hotel at Caledonia Springs, Ont., at a cost of about $2,000,000. We are officially advised that "there is as yet no truth in the report."

Galt to Brantford.—A press report credits the company with proposing to construct a line from Galt to Brantford, Ont., where it could obtain a connection with the Toronto, Hamilton and Buffalo Ry., of which the C.P.R. is part owner. This report has its origin probably in the improvements about to be effected upon the Grand Valley Ry.—an electric line extending from Galt to Brantford, and authorized to operate a freight service—and in which the C.P.R. was recently said to be negotiating for an interest.

St. Mary's and Western Ontario Ry.—Tracklaying on this line from Embro to St. Mary's, Ont., has been completed, and the first construction train was run into St. Mary's May 29. Ballasting is being pushed and it was announced that a regular train service would be put in operation July 1. Station buildings are being erected at the Farmers' Cheese Factory, Lakeside, and Bennington, and a temporary shelter is being erected at St. Mary's. A permanent building will not be put up at this point until the extension towards Sarnia is gone on with.

Guelph and Goderich Ry.—The work of completing the branch line into Listowel, Ont., is progressing satisfactorily, and everything was expected to be ready for the starting of a regular train service July 1.

Toronto to Sudbury.—Sir T. G. Shaughnessy, President, and a number of officials of the company went out from Toronto in a special train June 9, on an inspection trip, but did not get further than the southern branch of the Naiscootyong River, about 40 miles north of Parry Sound. At this point one of the piers of the bridge settled, letting one of the spans fall, just after a work train had got across. Temporary repairs were made, and the line was opened for traffic through to Sudbury, a distance of 260 miles from Toronto, June 15. The line extends from Bolton Junction on the Owen Sound line to Romford, on the company's transcontinental line, and was constructed as a branch line under the original charter. Construction was started at Romford, southerly, and subsequently at Bolton Junction, and the section from the latter point to Bala was opened for traffic in June, 1907. The stations on the section now opened are at Muskoka, which will be a divisional point; Barnsdale, Parry Sound, Carling, Point au Baril, Naiscootyong, Byng Inlet, Pickerel, Rutter, Paget and Burwash.

Port Arthur, Ont.—Owing to the bursting of the corporation dam on Current River, Port Arthur, Ont., a portion of the company's line was washed out, and for several days through traffic was suspended, passengers and mails being transferred by means of a tug. A temporary bridge with the necessary connecting track was completed May 31, and traffic resumed. Arrangements are being made for the reconstruction of the bridge.

Saskatoon, Sask.—A regular train service was placed in operation over the line into Saskatoon June 14. It is known as the Lanigan section, and extends from the station of that name, on the Pheasant Hills branch, to Saskatoon, 76.5 miles. The extension of the old Manitoba and Northwestern Ry., now under construction from Sheho, will effect a junction with this line at Lanigan.

Saskatoon Westerly.—Material is being collected at Asquith, Sask., for the continuation of the line from that point to the point of junction with the branch of the Calgary and Edmonton Ry., which now has its terminus at Hardisty, Alta. The bridge across the Battle River has been completed and the few miles of grading to connect up the different sections of the work are being pushed forward by the contractors.

Tilly to Crossfield, Alta.—Surveys are being made by C.P.R. engineers through the centre of the tract of country which is being developed by the irrigation project which the company is carrying out. The party in charge of —. Sharp started from Tilly, on the transcontinental line, 128 miles east of Calgary and is making for Crossfield, 29 miles north of Calgary, on the Calgary and Edmonton Ry. The party was camped in the Rosebud district, at the crossing of the Knee Hill trail, about 40 miles east of Calgary, June 1.

Calgary and Edmonton Ry.—It is reported that considerable improvements are being carried out on the line between Calgary and Strathcona, Alta., and that others are in contemplation.

Belly River Bridge.—Work has been commenced on the erection of the steel work upon the new bridge over the Belly River, near Lethbridge, Alta., on the cut-off under construction on the company's Crow's Nest Pass branch. The bridge is being erected by the Canadian Bridge Co., Walkerville, Ont.

Nicola, Kamloops and Similkameen Ry.—Two survey parties are reported to have been in the field for some time in connection with the projected extension of this railway. One party is reported to be exploring from Aspen Grove, in the direction of Trout Creek on Okanagan Lake and the other is working down the Otter River.

Esquimalt and Nanaimo Ry.—The superstructure for the steel bridges over the Nanaimo and Chemainus rivers is being placed in position. It is proposed to replace the trestles at Niagara and Arbutus with steel bridges, but it is not expected that the work will be done this year.

A contract has been entered into between the Dominion Government and the company for the construction, under the subsidy act, of a railway from Wellington to, or towards, Union Bay, by way of Alberni, not exceeding a distance of 55 miles. (June, pg. 399).

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Railway Commissioners' Traffic Orders.

4781. May 27. In the matter of the complaint of the City Council of Chatham, Ont., complaining that the G.T.R. Co. and the Wabash Rd. Co. refuse to issue passenger tickets for travel ever the portions of the G.T.R. Co.'s line of railway operated by both companies, which are available on the trains of either company, as was formerly the case; and applying for an order directing the companies to restore the practice; upon reading the petition, and what has been alleged on behalf of the companies respectively, the Board orders that the said companies be, and they are hereby, required to interchange passenger tickets between all stations in the Province of Ontario through which the railways of both companies run passenger trains. And the Board further orders that each of the said companies account to the other for the revenue earned upon the tickets so interchanged.

MONTREAL TERMINAL RAILWAY TARIFFS.

4866. June 16. In the matter of the filing with the Board of the standard tariffs, freight and passenger, of the Montreal Terminal Ry. Co., as provided by secs. 327 and 331 of the Railway Act: It is ordered that the Montreal Terminal Railway Company be directed to file its standard freight and passenger tariffs for the approval of the Board, in compliance with the provisions of the Railway Act, within 30 days from the date of this Order.

MONTREAL PARK AND ISLAND RY. FARES.

4883. June 17.—In the matter of the complaint of J. A. Charette, Mayor of Notre Dame des Neiges, complaining that the Montreal Park and Island Ry. Co. has failed to file with the Board, for its approval, its standard passenger tariffs, and that the said company charges passenger fares of 5c. each from points in the City of Montreal to Bellingham Ave., and an additional 10c. each from Bellingham Ave. to Cote des Neiges, while it previously sold tickets at the rate of 6 for 25c. for transportation to Notre Dame des Neiges. Upon the hearing of Counsel for the Montreal Park and Island Ry. Co., the Montreal St. Ry. Co. and the city of Montreal, the complainant not being present or represented at the hearing: It is ordered that the said complaint be dismissed.

MILITARY STORES AND ORDINANCE TRANSPORTATION.

4884. June 17.—In the matter of the application of the Department of Militia and Defence for an Order requesting that a reconsideration of the military freight tariffs be made with reference to the following: Field Guns—Under the present tariff, these are charged at a much higher rate than that charged the public for heavy machinery. It is therefore requested that the military rate be reduced to that charged the public for heavy machinery. Ambulances—The rate charged for these is much in excess of that charged the public for hearses. It is therefore requested that the military rate be reduced to that charged the public for hearses. Upon reading what has been alleged in support of the application and on behalf of the Canadian Freight Association, and upon the report of its Chief Traffic Officer: The Board orders that the re-classification of military stores and ordnance embodied in the letter of W. R. MacInnes, Chairman of the Advisory Committee of the Canadian Freight Association, to the Secretary of the Board, dated March 30, 1908, be approved, except that the proposed description and ratings of projectiles be changed to read as follows, namely:

Projectiles for artillery:	L.C.L.	C.L.
Shot, solid, also case shot containing no explosives....................	3	5
Shot and shell containing explosive —subject to rule 11.............		
Shot and shell, hollow but empty...	3	5

And the Board further orders that the said re-classification be published in a separate supplement to Canadian Classification 13, to take effect not later than July 15, 1908.

SUGAR RATES FROM VANCOUVER.

4886. June 16.—In the matter of the application of the British Columbia Sugar Refining Co., Ltd., complaining that the C.P.R. Co. in its rates on sugar in carload lots to Winnipeg and other points in Manitoba unjustly discriminates against them and in favor of the sugar refineries in Eastern Canada, and applying for an order directing the railway company to give the complainants the same rate from Vancouver to Portage la Prairie as it gives from Mon-

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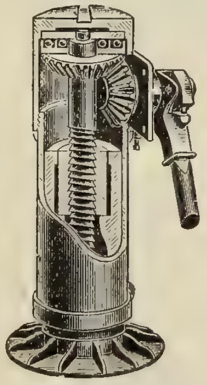
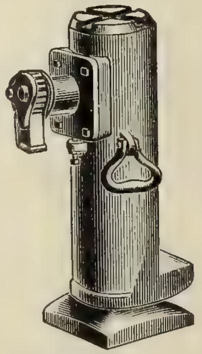
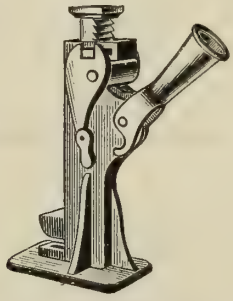
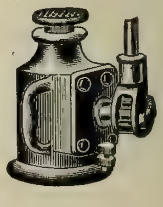

Sectional View


Foot Lift Jack


15 Ton Track Jack

Traversing Jack


Journal Jack

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treal to Portage la Prairie, and the same rate from Vancouver to Winnipeg as it gives from Montreal to Brandon, and the same rate from Vancouver to Brandon as it gives from Montreal to Winnipeg. Upon the reading of what has been alleged in support of the application and on behalf of the Railway Company, and upon the report of its Chief Traffic Officer, the Board orders that on or before July 20, 1908, the company restore the arrangement whereby the rate on sugar in carloads from Vancouver to Portage la Prairie, Man., was made the same as from Montreal to Portage la Prairie; also that the rate from Vancouver to Winnipeg be made no greater than 78c. per 100 lbs., and that the rates from Vancouver be made the same as from Montreal to Treherne and Crystal City, Man., and the rate from Vancouver to Winnipeg the maximum from Vancouver to Minnedosa, Man.; the rates from Vancouver to intermediate points in Manitoba, Saskatchewan, and Alberta to be reasonably scaled, with the above mentioned rates as maxima, and those to other branch line points also to be reasonably scaled on the above mentioned base points, satisfactorily to the Board. And the Board further orders that either party be at liberty to apply to rescind or vary this Order, in which event the Board will fix a date to hear oral evidence and argument.

The Muskoka Passenger Case.

The Canadian Northern Ontario Ry. applied to the Board of Railway Commissioners in Feb. last for an order under the Railway Act, sec. 317, directing the C.P.R. and the G.T.R. to provide facilities for passengers desiring to travel from or through points on the respondent company's lines to points on the C.N.O.R. and its connections, and to issue tickets at through rates accordingly.

The following judgment was given by Chief Commissioner Mabee, May 25: "At the conclusion of the argument, I was of the opinion that the Canadian Northern Ry. Co. was entitled to relief as to non-competitive points only, and this view has been strengthened by a further consideration of the case, and is shared in by the Chief Traffic Officer. It does not seem to me to be a reasonable proposition that one railway company should be at liberty to use the act for the purpose of diverting its line traffic, that has been originated only at great expense and trouble by another railway or other railways, without at least showing a great preponderance of convenience to the public. It must be borne in mind that this application comes from the railway company, and no evidence was given that any inconvenience was being caused to the public from existing conditions, or that there would be any appreciable advantage to the public if the change asked for was granted; and that the change would be for the pecuniary benefit of the applicant railway company is not of itself any sufficient reason for granting the application. Under sec. 317, the facilities to be afforded are to be reasonable; the preference or advantage that would be given, or the delay or difference in treatment that may be permitted, is not to be unreasonable; so it is apparent that the whole section is intended to provide for the establishment of fair and reasonable business relations. Is it fair that the applicant should be permitted to make use of the act to divert from the G.T.R. and C.P.R. lines at Toronto, the tourist traffic that the last-mentioned railways have spent years in developing? That this would be to the advantage of the applicant is clear, but it has not been shown that the public is to any appreciable extent interested. I agree with the argument of the applicant that the physical situation of the railways falls within s.s. 4; but it has not been shown that any 'obstruction is offered to the public desirous of using such railways as a continuous line of communication.' I do not agree with the contention that existing conditions must be changed merely because a few and inconsiderable number of people might desire to change at Toronto to the applicant's lines; and I cannot regard it as reasonable or proper that railways should, in the application of this section, be put to serious loss and inconvenience when it is apparent that the real object of the application is not to offer greater facilities to the public, but to enhance the earning powers of the applicant's lines.

"I do not think upon the facts of this case, having regard to the history of the development of the Muskoka traffic and the location of the C.P.R. and G.T.R. lines, not only from the border to Toronto, but from there north to tourist points, that the arrangement between these companies is an undue and unreasonable preference as against the applicant.

"It was asked that an order should be made compelling the respondents to allow American lines to issue a through ticket, entitling the passenger to change to the applicant's line at Toronto for points not reached by the respondents' lines. This, again, is in the interest of the applicant; but it has not been shown that any public demand exists for such a change, even if the Board could work out such an order by jurisdiction over the respondent companies, nor is it sufficient to make any such attempt, that the applicant might develop tourist traffic to points upon its line not reached by the other railways.

"I do not base my view upon the construction of the act that sec. 317 applies only to non-competitive points, and am not so deciding. Cases might arise where the interests of the public required the application of the section to such places; and in the meantime it is sufficient for this case to say that the applicant is not asking for what is fair and reasonable.

"I think an order should go requiring the companies forthwith to agree upon and publish joint fares and rates, arranging the proper apportionment thereof, on joint traffic other than that having its origin at G.T.R. or C.P.R. points, or with companies that connect with and deliver to those latter companies and destined to points common to the applicant's and respondents' lines. The other requests contained in the application are refused."

The order was made as follows.

4784. April 23. In the matter of the application of the Canadian Northern Ontario Ry. Co., under sec. 317 of the Railway Act, for an order directing the G.T.R. Co. and the C.P.R. Co. to provide facilities for passengers desiring to travel from or to points on the lines of the respondent companies, or either of them, to points on the lines of the applicant company and its connections; and to issue tickets at through rates accordingly: Upon the hearing of counsel for the applicant company and the respondent companies, the evidence adduced, and what was alleged; and upon the report of the Chief Traffic Officer—It is ordered that the applicant company and the respondent companies be required to agree upon, publish, and file tariffs of joint passenger tolls, arranging the proper apportionment thereof, to apply on passenger traffic interchanged between the said companies, other than that having its origin at the respondent companies' points or with companies that connect with and deliver to the respondent companies, and destined to points common to the applicant company's and the respondent companies' lines, and it is further ordered that the other requests contained in the application herein be, and the same are, hereby refused.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Canadian Westinghouse Co., Ltd., has been licensed under the act respecting extra-provincial companies to carry on business in British Columbia, with an office at 439 Power St., Vancouver, and J. R. Read as its attorney.

In the description of the new Winnipeg Union Station in our last issue it was mentioned that concrete piles will be used for the foundations of the station building. We are advised that Raymond concrete piles have been selected for the work.

M. Beatty & Sons, Welland, have completed a steel dredge and three scows for the Dominion Dredging Co., and these recently left Welland in tow for St. John, N.B. Another scow for the same company is in course of construction, and also a fourpocket steel dump scow for another firm.

"Reactions" is a quarterly publication issued by the Goldschmidt Thermit Co., and devoted to the science of aluminothermics. The last issue contains a notice of the opening of the company's Canadian branch at 103 Richmond St. West, Toronto. The Canadian branch will carry a full and complete supply of Thermit and appliances, and its engineering staff will be at the disposal of interested parties, to advise on, or execute, all work suitable for the process, such as welding locomotive frames and drivers and electric motor cases. It will undertake, by contract, the welding of tram rails in paved streets, the welding of heavy sections such as sternposts of steamships, crank shafts and other steel sections. At the shops, repairs on small castings, not exceeding 1,000 lbs. in weight, will be undertaken.

Minister of Railways' Jurisdiction.

In Dec., 1906, the G.T.R. filed a plan with the Department of Railways at Ottawa showing a proposed diversion of its main line to avoid the Scarboro gradients in approaching Toronto from the east. It was proposed to start the diversion at Highland Creek bridge, 48 chains west of Port Union station, to reach the Lake Ontario beach about 2¼ miles west of Port Union station, and to run along the water's edge to the vicinity of Munro Park, passing south of the Woodbine race track, and connecting with the existing main line in the Don yards. The Minister's approval of the proposed deviation was asked, and a date was fixed for hearing the application, at which the City of Toronto was represented, as residents of the Balmy Beach district strongly objected to the proposed route. After one or two postponements it was announced that the application would not be heard, the Department of Justice having given an opinion that the Minister had no jurisdiction in the matter.

A return of the correspondence, etc., which has recently been presented to the House of Commons, shows that the Deputy Minister of Justice, in the opinion referred to, stated that the Minister of Justice agreed with him that the Railway Act did not confer jurisdiction on the Minister of Railways in this respect, and that sec. 157 of the Act did not apply to the case, which apparently falls under sec. 167, as a deviation, change or alteration required to be made in the railways as already constructed.

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has been proved by the use of Continuous, Weber and Wolhaupter base-supported rail joints—after ten (10) years' service, having a record of over **25,000 miles in use**—the extent of which is evidence of their excellence.

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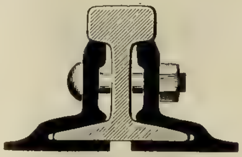
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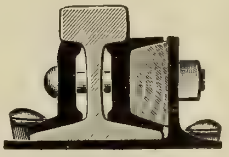
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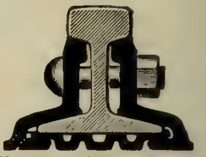
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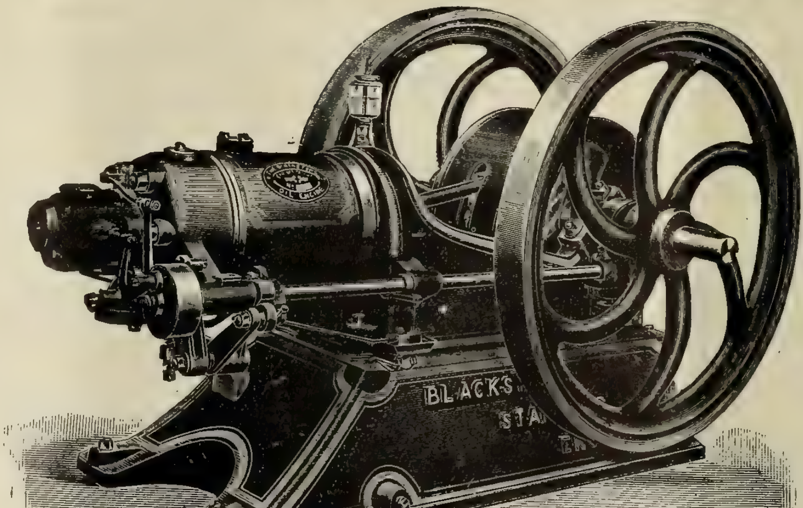

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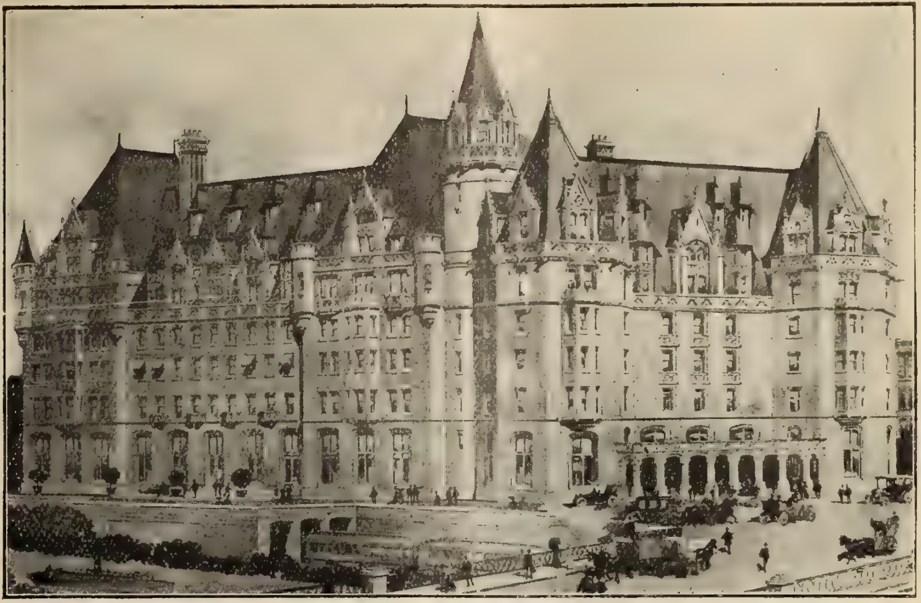
G.T.R. Betterments, Construction, Etc.

C. M. Hays, Second Vice-President and General Manager, returned to Montreal June 8, having completed an inspection of the company's lines in Ontario, and the connections with lines in the U.S. In the course of the trip, Mr. Hays, who was accompanied by a number of other officials, went across Lake Ontario on the ferry steamer Ontario No. 1, from Cobourg, Ont., to Rochester, N.Y.; and went to Chicago, Ill., in connection with the affairs of the Chicago, Western Indiana and Belt Line Ry., in which the G.T.R. is interested. A press report from Owosso, Mich., states that as a result of a meeting of the company's officials with the farmers of the district, a project for railway extension in the northern part of that territory is under consideration. The G.T.R., it is said, offered to extend its line 10.50 miles to a coal mine in New Haven township for one-half the cost price of construction, which will be $80,000. The farmers and the coal mine have accepted and have appointed the committee to raise $40,000. The line will be exclusively for freight handling, mostly coal and sugar beets for Owosso. The line will be extended four miles out of its original course to the village of New Lothrop, providing that the people of that place and vicinity will raise $18,000. A committee of 50 has been appointed from that neighborhood to make the attempt.

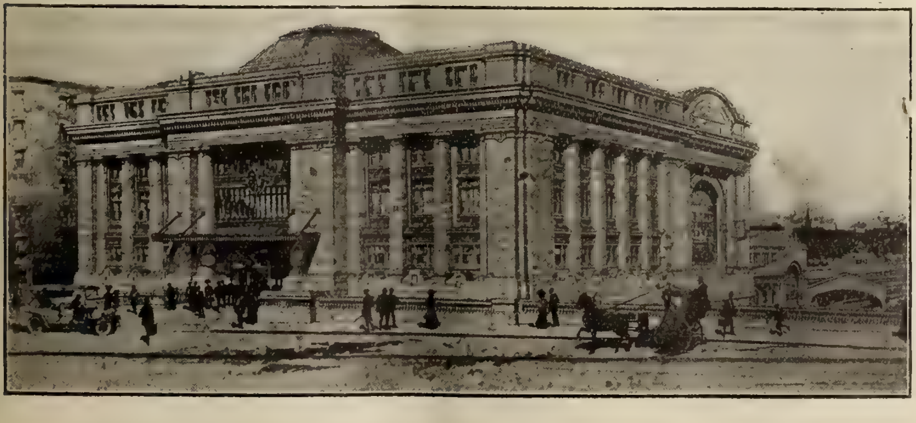
Montreal-Toronto Line.—The track between Mille Roches and Cardinal, Ont., 33 miles, is being relaid with 100-lb. steel. When this is completed the portion of the line between Montreal and Brockville will have been relaid with these heavy rails.



HOTEL TO BE ERECTED BY THE GRAND TRUNK RY. AT OTTAWA.

Ottawa Terminals.—The Dominion Government approved of the plans for the construction of the new joint terminal station and hotel at Ottawa, which have been submitted by the G.T.R., which is responsible for its erection. Prior to their submission to the Government the plans and specifications, and the terms of the agreement thereto, were fully considered by the special committee of the city Board of Control, and approved. The agreement has not been finally approved by the city council, as a number of the aldermen desire to have a "fair wage" clause inserted. It is expected, however, that the agreement will be signed early in July. The agreement provides for the erection of a station to cost $250,000, and an hotel to cost $1,000,000, the city to give the company a fixed assessment of $150,000 on the station for 20 years, and of $500,000 on the hotel for 15 years. The plans finally approved were prepared by Ross and Macfarlane, architects, Montreal, and while they follow in general the dimensions and lines of the plans originally submitted, they are less ornate and costly. A general description of the station building was given in our issue for Nov., 1907, which applies practically in its entirety to the present plans. The classic style of architecture has been chosen as being the most appropriate for a railway terminal, and because it also lends itself to the best disposition of office accommodation. The exterior of the building will be of light buff Indiana limestone or Ohio sandstone, and the internal structure of steel framework, concrete and terra cotta.

The main entrance to the hotel will open from a large portico into a spacious hall. On the ground floor will be the office commanding the entrance from the railway subway, and the other exits and entrances, while the steward's office will be located in the basement, where the kitchens, employes' rooms, billiard room, grill room, etc., will also be located. The general dining rooms will be on the main floor, and the bedrooms, etc., are on the upper floors. On the first floor, it is proposed to have 33 chambers, of which three will form the state apartments and two will be parlors. On the second, third, fourth and fifth floors there will be 58 chambers on each, and on the attic floor 37 chambers for guests, 2 dormitories for men and 5 dormitories for women. Of the total number of 302 sleeping apartments for guests, 155 are to have private bathrooms, 104 will have basins, and all will have cupboards. All the rooms will be of good size. There will be ample stairways, wide corridors, and numerous elevators. Fire escapes will be provided on each floor, and there will be fire doors in the corridors.



CENTRAL STATION TO BE ERECTED BY THE GRAND TRUNK RY. AT OTTAWA.

It is expected that work will be started at an early date upon the main building. At present there is under construction a building which will form an annex to the station building, and be utilized for baggage and express purposes

Kingston, Smith's Falls and Ottawa Ry.—The annual meeting of shareholders of this company, a number of the directors of which are G.T.R. officials, was called for June 2, but was adjourned indefinitely.

Burlington Beach.—According to a Hamilton despatch it has been discovered that the G.T.R. has no rights on the beach at Burlington, Ont., and that as a result it will have to pay $500 a year to the Beach Commission for keeping its tracks there.

Guelph Station.—The Guelph, Ont., City Council passed a resolution May 27, instructing the City Solicitor to take the necessary proceedings against the company for not providing in the city the passenger accommodation required by the charter. As a preliminary the company was asked to submit proposals for the consideration of the council by June 21.

Stratford Improvements.—In connection with the recent visit of the company's officials to Stratford, C. M. Hays, Second Vice-President and General Manager, said when the work of constructing the additions to the locomotive shops had been completed, attention would be given to the straightening out of the tracks and the building of a station worthy of the growing city. The work would not be undertaken this year, the company having too many other large undertakings on hand, and the financial conditions at present were none too favorable.

London Improvements.—W. G. Brownlee, General Transportation Manager, stated at London, June 14, that after making a thorough examination of the system, C. M. Hays, Second Vice-President and General Manager, and the other officers had decided that such improvements as are deemed necessary are too expensive to be carried out under present conditions, and all the work that had been planned will be left over until next year, at any rate. In connection with the statement, Mr. Hays, while in the city June 4, said if London had accepted the company's

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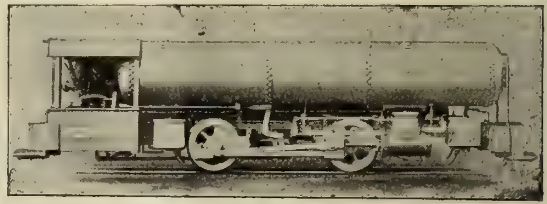

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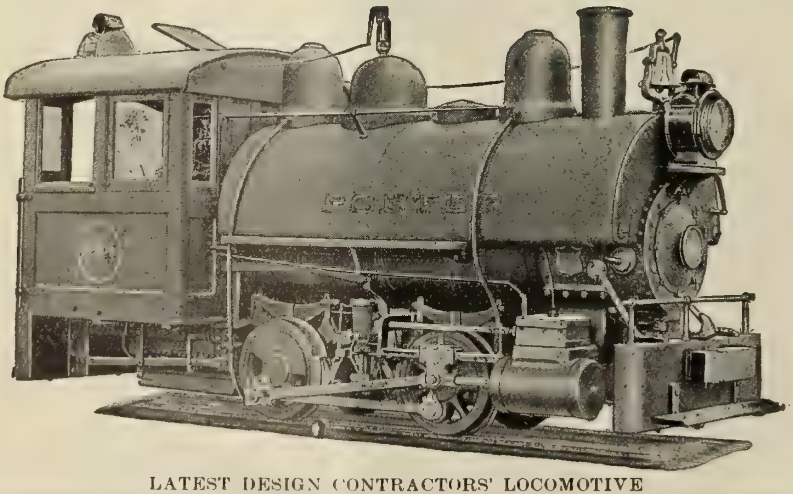

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offer as to elevated tracks a couple of years ago, the work would have been done by now, and a new station erected. It was usual in other places, he said, for the city desiring elevated tracks to bear one-half of the expense, and it would be only fair that when London was ready to deal with the question that should be understood.

Great Northern Ry. Lines in Canada.

The Northern Pacific Rd. Co., which is closely allied to the G.N.R. Co., and formerly operated the lines acquired in 1901 by the Manitoba Government and leased to the Canadian Northern Ry. for 999 years, is reported as proposing to construct a line parallel to the Pembina-Winnipeg line, so as to give it access to the latter city. Interests allied with the company obtained an act from the Manitoba Legislature in 1903, under the title of the Manitoba Central Ry., and it was stated that the company, or interests allied with it, were also interested in the Avondale-Brandon Central Ry., incorporated the same year. The Midland Ry. of Manitoba was incorporated the same year with C. S. Nullin, then President N.P.R., as a provisional director. In an interview given about that time, J. J. Hill, President Great Northern Ry., stated that that company was not interested in the M. Ry. of Manitoba. Since then, however, the M. Ry. of M. has constructed lines to Portage la Prairie, and to Morden, Man., both of which are continuations of G.N.R. branch lines, and both of which are operated by the G.N.R.

Winnipeg Terminals.—Despatches from Winnipeg state that renewed interest is being manifested in the proposals of Great Northern Ry. interests to construct terminals and a Canadian line. L. W. Hill, President, recently paid a visit to Winnipeg, and then went west through Saskatchewan and Alberta. The company's right-of-way agents subsequently became active in securing additional land in the city.

Crow's Nest Southern Ry.—M. J. Costello, Assistant Traffic Manager G.N.R., recently visited Calgary, Alta., in company with a number of other officers of the railway. He said their visit was unofficial and he could not say when, if at all, the G.N.R. would be constructed to Calgary. It is generally understood locally that the surveys being made for the company are for an extension of the Crow's Nest Southern Ry. to Calgary.

Following the completion of the extension of this line from Fernie to Michel, B.C., press reports state that it has been decided to still further extend the line to Calgary, Alta. Surveys have been made for a considerable portion of this extension, and reports state that construction will be gone on with at an early date.

Saskatchewan and Alberta Lines.—An announcement was recently made to the Associated Boards of Trade of Saskatchewan that as soon as the gaps in the company's line in British Columbia were closed, and the Crow's Nest Southern Ry. extended to Calgary, the company would undertake the construction of a line from Winnipeg to Calgary.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—The line between New Westminster and Vancouver, B.C., constructed by the Vancouver, Westminster and Yukon Ry., has been formally amalgamated with the V., V. and E.R., as have also the mainland lines constructed under the charter of the Victoria Terminal Ry. and Ferry Co. In connection with this latter line, application is being made to the Governor-in-Council for approval of plans of bridges to be constructed over the Serpentine River, and over the Nicomekl River, on the portion of the line under construction between Olivers and Blaine, Wash. Plans of the bridges and descriptions of the sites have been deposited with the Minister of Public Works at Ottawa, and in the Land Registry Office at New Westminster, B.C. Tracklaying was commenced on this line early in May, commencing at Blaine, at the International boundary. As soon as the tracklaying gang has reached the Nicomekl River, work will be transferred to the Olivers end, and continued to the Serpentine River crossing, pending the erection of the bridges. There is only a short length of line between the two rivers, and this it is expected will be finished up within a few days after the bridge work has been completed. It is hoped to have the new line opened by the end of the summer.

The grading on the extension from Keremeos to Hedley, B.C., is reported to be practically complete, and the gangs have been moving on towards Princeton, the contracts for the section from Hedley to Allison having been let. The contractors are figuring on the section from Allison to Princeton. Surveys are being made for the construction of a spur to the Vermillion Forks Co.'s colliery. The latest reports from Keremeos stated that it was expected that tracklaying would be started at that point June 15. (May, pg. 327.)

Facilities for Cattle Shipments.

The Western Cattle Association, at a meeting in Winnipeg recently, decided to petition the Board of Railway Commissioners as follows:

That railways be compelled to furnish cars within a reasonable time after ordering, say four or five days.

That on all lines a scheduled freight train be run once a week or oftener, as trade calls for, and at a rate of from 20 to 25 miles an hour.

That sufficient yardage be provided, properly equipped with feed racks and water troughs, so that cattle can be cared for at loading points, and unloaded at least once every 24 hours for food and water.

That shippers kept waiting an unreasonable time should be paid by the company for their loss and expense, and that in case export cattle are kept waiting so long as to lose their boat, the railway company be held responsible for the loss.

* * *

Manual of Statistics for 1908.—The 30th annual number of this standard volume of reference has been issued by the Manual of Statistics Co., 20 Vesey St., New York. The data contained in its 1,080 pages covers in a concise and complete form the information regarding railway and other transportation securities, industrial stocks, and other securities, as well as a large amount of statistical information required by investors and others interested in transactions on the stock exchange. The various tables show evidences of accuracy and careful compilation. For easier reference the subdivision of the securities classed under the general heading of industrials would be an advantage. At present under this heading there are grouped manufacturing concerns, street railways, electrical, gas, mining, land, coal, iron and steel plants, telegraph and telephone companies, express companies, and a number of miscellaneous corporations, the whole taking up about 500 pages. The price of the volume is $5.

The Minister of the Interior, replying to a question in the House of Commons recently, said prior to June 30, 1906, the total acreage in Manitoba, Saskatchewan and Alberta granted to railways in odd numbered sections was 29,550,179 acres, and in even numbered sections 2,217,775 acres. From that date to Nov. 1, 1907, no land had been granted to railways in these provinces.

Railway Bills of Lading.

J. P. Mabee, Chief Railway Commissioner, issued the following circular April 24:

"In Mar., 1905, complaint was made to this Board regarding the form of bills of lading in use by the railways and which had been temporarily approved in Oct., 1904. The complaint came from the Canadian Manufacturers' Association, and was afterwards supported by the Bankers' Association, by various Boards of Trade, merchants, and shippers throughout the country. After much delay, in Feb., 1907, a draft bill of lading was submitted by a select committee appointed by the railway companies, and this was printed and distributed among those interested in the matter, the result being that the Board received from various shippers and business parties throughout the Dominion a variety of suggestions as to changes and modifications that should be made. The Winnipeg Jobbers' and Shippers' Association submitted a form and afterwards requested that it be withdrawn. There does not appear from all the mass of correspondence and suggestions, any concerted idea of what would, from the shippers' point of view, be a fair contract; on the other hand, the proposition of the railways has been before the Board since Feb., 1907. There seems to be no reason why this matter should not be dealt with, three years having elapsed, and not much progress made. The letters and circulars from the shippers and those interested, from their standpoint, contain such divergent ideas that the matter is left in a most difficult and complicated position for the Board to deal with.

"When the question of a uniform bill of lading was before the Interstate Commerce Commission, upon the complaint of the Illinois Manufacturing Association, much the same diversity of opinion existed among the shippers, and the Commission suggested that, the matter being one for negotiation between the various conflicting interests, a joint committee of the carriers and shippers should be formed with the view of adjusting the points in dispute. The result was that a contract was ultimately agreed upon. The Board is of the opinion that a similar course may produce good results in the present instance, and suggests that the shippers appoint a committee to meet the committee of the carriers that adopted the contract submitted by them. This should produce unanimous agreement among the shippers as to what is deemed from their standpoint to be a fair contract; and adjustment of many, if not all, of the terms of the contract. This circular is being sent to all the persons and associations that have corresponded with the Board upon the subject, with the suggestion that arrangements be at once made between them for the appointment of a small committee to meet, with as little delay as possible, the committee representing the railways. This Committee of the shippers should be clothed with authority to represent all their interests; there should be a secretary to this committee, with whom correspondence with this Board may be carried on, and the delay and labor of corresponding direct with the various persons and associations saved. The Board will be pleased to learn that immediate steps are taken upon the above lines, to facilitate its dealing with this matter, and will grant a special sitting at any time to hear the parties interested, or deal with any counter suggestions, either from the shippers or the railways. W. E. Foster, of the G.T.R. Co., Montreal, is the Secretary of the subcommittee representing the railway interests."

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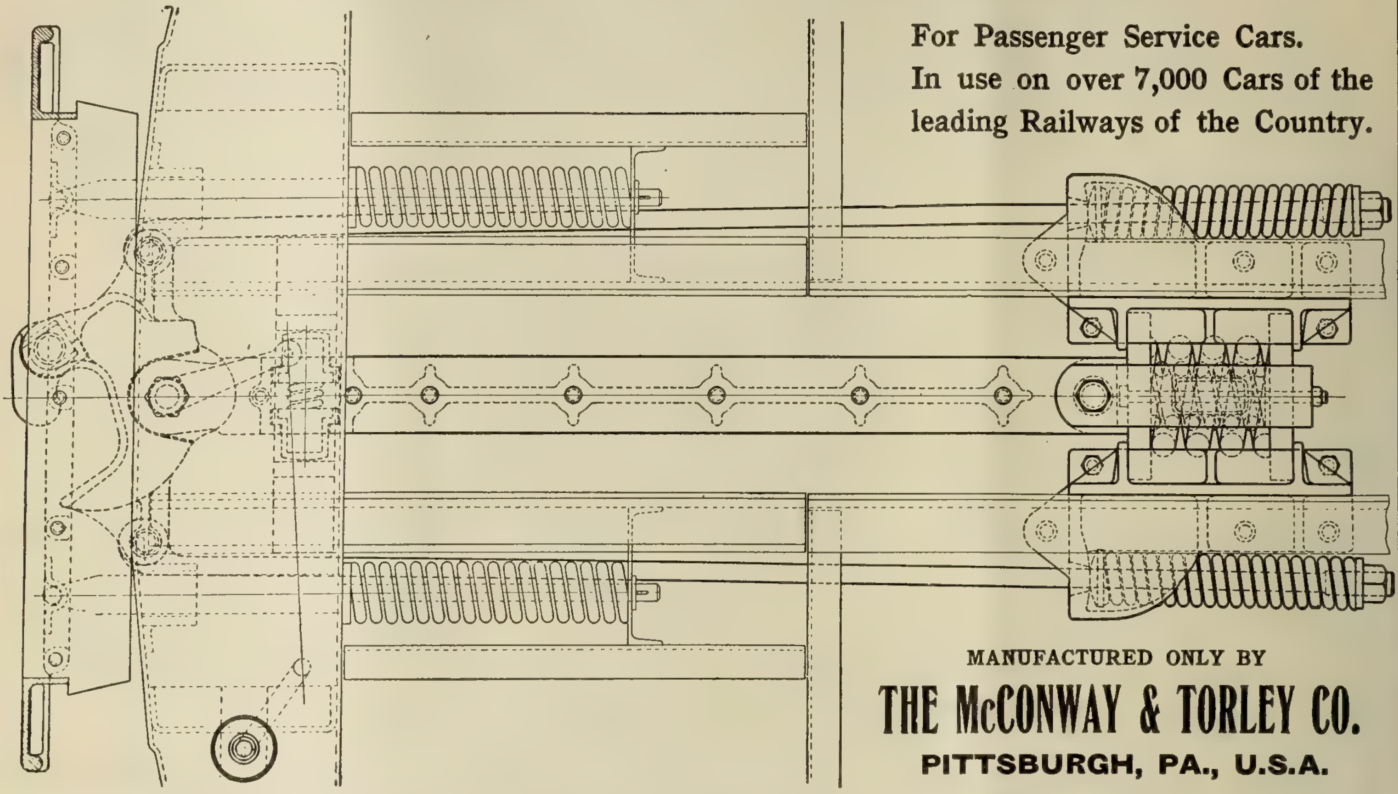

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Railway Finance, Meetings, etc.

Alaska Central Rd.—J. J. F. Goodwin has been appointed receiver of this company by the territorial court at Fairbanks, Alaska, on the application of Seattle, Wash., and Canadian interests, which hold $3,000,000 of the company's bonds as security for advances. The company was controlled by A. C. Frost, of Chicago, Ill., and H. C. Osborne, Toronto. The Sovereign Bank of Canada, which is being wound up by a Committee of Banks, holds the bonds.

Grand Trunk Pacific Ry.—A bill under discussion at the current session of the Dominion Parliament, provides that G.T.P.R. bonds, authorized by chap. 98 of the Statutes of 1905, may be issued and pledged for the construction of the Western Division of the line, the money so raised to be deposited to the credit of the Minister of Finance and the Receiver-General, in accordance with the provisions of the deed of trust. Provision is also proposed to be made for the delivery of the bonds to the pledgees; for the sale and reissue of the pledged bonds. These provisions are not to affect the bonds mentioned in the deed of trust, "provided that the amount of the said bonds pledged and bonds delivered to purchasers at any one time outstanding shall not exceed the said principal amount, and that purchasers and holders of bonds which have been so pledged shall, notwithstanding that they have been so pledged, be deemed to have, and shall in fact have, all the rights, remedies, claims, benefits and priorities, by the deed of trust conferred upon holders of bonds duly issued under and secured by the said deed." The amount of the bonds at any one time outstanding shall not exceed £14,000,000. In order to avoid delays, the Minister of Finance may issue to contractors on the G.T. Pacific Ry. credits in respect of work done and materials supplied; the total of such credits not to exceed, at any one time, $1,000,000; credits are to be issued upon application of the company, and the certificate of an officer appointed by the Government. An agreement is to be entered into between the company and the Government with respect to these credits, and it is also provided that there shall be deducted from time to time, from the monthly payments mentioned in sec. 4 of article 3 of the trust deed, the respective amounts which the Chief Engineer or other officer under sub.-sec. 3 of the present act may certify have been used in and applied to construction work as defined in the trust deed.

Guelph Junction Ry.—It is reported that the share of the City of Guelph, Ont., of the receipts of the G.J.R., for the first quarter of 1908, were $4,014.29, against $4,462.19 for the corresponding quarter of 1907. The decrease in the revenue is said to be largely due to the snow blockades on the line during the winter.

Halifax and Southwestern Ry.—At the recent session of the Nova Scotia Legislature the following information was given by the Minister of Finance in reference to the Government's connection with the financing for the construction of this railway. Amounts advanced to the company on account of construction: Halifax to Barrington Passage, 196.5 miles, $2,721,380.66; Barrington Passage to Yarmouth, 50.2 miles, $675,000.00; Victoria Beach Ry., 40 miles, $400,000.00; Central Ry., 61.8 miles, $424,000.00; Liverpool and Milton Ry., 5.3 miles; it is proposed to consider this as part of the main line from Halifax to Yarmouth; any other railway undertaking (this covers the Caledonia branch, 22.2 miles), $299,700.00. The following liabilities of the province on account of these lines are still unpaid: Halifax to Barrington Passage, $9,060.97; Liverpool and Milton Ry., $71,550.00. The amount of interest to be added to the principal of the mortgage under chap. 11 of the act of 1907, is $226,190.93. The total amount of principal of the mortgage is now $4,601,690.93. The amount of interest accrued to Sept. 30, 1907, which has been paid by the company, was $111,847.73. No interest paid by the company has been refunded or credited back.

Intercolonial Ry.—In addition to the items already reported, the House of Commons, at its current session, has voted $7,875,000 on account of collection of revenue of the I.C.R., and $30,625 on account of the collection of revenue on the Windsor branch.

The receipts of the line for the year ended Mar. 31, according to a statement by the Minister of Railways in the House of Commons, were $9,173,553, and the working expenses $9,157,435, leaving a surplus of $16,123. The capital expenditure during the same period was $4,380,494. During April of the current financial year, the expenditure on the railway exceeded the income by $275.

Michigan Central Rd.—The annual general meeting of Canada Southern Ry. shareholders was held at the head office, St. Thomas, Ont., June 3, Nicol Kingsmill, K.C., of Toronto, in the chair, and W. B. Kingsmill, of St. Thomas, acting as Secretary. More than three-fourths of the shareholders were represented. The following were elected directors: W. K. Vanderbilt, F. W. Vanderbilt, C. M. Depew, S. F. Barger, E. A. Wickes, H. B. Ledyard, J. E. Brown, H. McK. Twombly, W. H. Newman. Meetings were also held, at the same place, of the Niagara Grand Island Bridge Co. and the Niagara River Bridge Co., and the same directors were elected as in the case of the Canada Southern Ry. Co. There has been no change in the board of any of the companies since last year.

New Brunswick Ry. and Coal Co.—The New Brunswick Government has appointed Hon. P. A. Landry one of the Judges of the Supreme Court, A. I. Teed, St. Stephen, N.B., and F. McDougall, Manager of the Royal Bank at Moncton, N.B., a special commission to enquire into the question of the construction and financing of the N.B. Ry. and Coal Co.'s railway, and of the purchase of the old Central Ry. of New Brunswick, which has been amalgamated with it.

Replying to questions in the House of Commons, May 27, the Minister of Railways said purchases of steel rails and frogs to the value of $44,384 11 had been made from the Intercolonial Ry. by this company in 1902 and 1903, and a payment of $4,925 had been made on account. The balance due, including interest, $8,037.23, was $47,496 34. It was claimed that there was a balance due to the company under the subsidy account, but no amount had yet been determined. The matter was receiving the attention of the Government.

On June 8, the Premier of New Brunswick interviewed members of the Dominion Government with a view of securing an additional subsidy towards the construction of the line between Chipman and Minto, N.B., 15 miles. A subsidy of $3,200 had been voted and paid, but the province claims that the cost of construction has been sufficiently heavy to justify the payment of a subsidy at the rate of $6,400 a mile.

Prince Edward Island Ry.—The House of Commons, at its current session, has voted $350,000 on account of collection of revenue in addition to the sums previously voted this session.

Quebec Central Ry.—Gross earnings for April, $101,950.69; expenses, $65,486.98; net earnings, $36,463.71; against $85,747.86, gross earnings; $53,179.47, expenses; $32,568.39, net earnings, for April, 1907. Gross earnings for 4 months ended April 30, $340,219.70; expenses, $246,434.77; net earnings, $93,784.93; against $262,894.35, gross earnings; $189,907.67, expenses; $72,986.68, net earnings, for same period 1907.

Temiskaming and Northern Ontario Ry.—Gross earnings monthly since Dec. 31, 1907, to May 31, are: Jan., $49,223.30; Feb., $43,537.13; Mar., $61,591.38; Apr., $61,319.19; May, $67,354.66; total, $283,025.66.

Temiscouata Ry.—Traffic receipts for April, $18,590.30, against $16,495.75 for April, 1907 Total receipts for 4 months ended April 30, $65,020.76, against $54,433.55 for same period 1907.

White Pass and Yukon Route.—A mortgage deed given by the British Yukon Ry., one of the companies operating under the general title of the W. P. and Y. route, upon the line, rolling stock, etc., of the White Horse Copper Mines branch of the company's railway, to secure an issue of bonds at the rate of £6,000 a mile, not to exceed £96,000 in all, has been deposited with the Secretary of State at Ottawa.

G.T.R. Apprentices' Examinations.

The annual competitive examination in mechanical drawing and practical mechanics of apprentices on the G.T.R., has just been completed. The number of apprentices competing was 283, with the following standing as regards stations. 1st, Montreal; 2nd, Stratford, Ont.; 3rd, Fort Gratiot, Mich.; 4th, Toronto; 5th, Portland, Me., and very marked progress has been shown and very creditable work done by the apprentices during the winter. The railway company, as well as the boys, feel the benefit of this. A large exhibit was made at the railway mechanical conventions at Atlantic City, N.J., June 17 to 24.

The following apprentices obtained prizes in mechanical drawing: Montreal—1st year, G. Inns; 2nd year, P. Drummond; 3rd year, W. Thorpe; 4th year, H. Thomas; 5th year, A. Hunter. Stratford—1st year, J. F. Tonge; 2nd year, A. P. Stone; 3rd year, L. N. Lansky; 4th year, R. R. Lundy; 5th year, W. Sealy. Fort Gratiot—1st year, J. M. Vicary; 2nd year, John Beach; 3rd year, T. E. Rice; 4th year, F. G. Abey; 5th year, J. L. Forster. Toronto—1st year, A. Jacques; 2nd year, W. Campbellton; 3rd year, A. Wiles; 4th year, W. Large. Portland—2nd year, G. A. C. Renell; 4th year, C. E. Harris.

The following apprentices obtained prizes in practical mechanics: Montreal—1st year, F. Allen; 2nd year, P. Drummond; 3rd year, W. Thorpe; 4th year, W. Twigg; 5th year, A. Hunter. Stratford—1st year, E. Porter; 2nd year, N. Durst; 3rd year, O. Cooke; 4th year, A. Chenoweth; 5th year, W. Sealy. Fort Gratiot—1st year, R. J. Kerwin; 2nd year, J. Beach; 3rd year, M. E. Burkholder; 4th year, F. G. Abey; 5th year, F. W. Hornby. Toronto—1st year, A. Jacques; 2nd year, W. Campbellton; 3rd year, A. Wiles; 4th year, W. Large. Portland—1st year, W E. Courtland; 2nd year, G. A. C. Renell; 3rd year, C. G. Harris.

General Passenger Agents' Meeting.—The American Association of General Passenger and Ticket Agents, which will hold its next annual meeting at Toronto, Sept. 22 and 23, has as its officers this year: O. H. Taylor, New York, President; G. T. Bell, Montreal, Vice-President; and C. M. Burt, Boston, Mass., Secretary. F. F. Backus, Hamilton, Ont.; F. E. Barbour and T. Henry, Montreal, are members of the Standing Committee representing Eastern Canadian Passenger Association territory. A local Executive Committee, to arrange for the entertainment of the Association, has been elected as follows: B. W. Folger, Toronto, Chairman; G. T. Bell, W. Stitt, T Henry, Montreal; C. B. Foster, J. D McDonald, J. O. Orr, A. Leadley, A. J. Taylor, H. F. Chaffee, W. Phillips, W. H. Moore and L. Solman, Toronto.

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Railway Rolling Stock Notes.

The Temiskaming and Northern Ry. has added one steam crane to its equipment.

The Intercolonial Ry.'s official car 37 is being overhauled and rebuilt by the Preston Car and Coach Co., Preston, Ont.

The Intercolonial Ry. has received the balance of the 400 box cars ordered from the Crossen Car Mfg. Co., Cobourg, Ont.

The Quebec and Lake St. John Ry., between May 15 and June 15, received 95 30-ton box cars from Rhodes, Curry & Co., Amherst, N.S.

The G.T. Pacific Ry. during May received from the Montreal Locomotive Works 7 locomotives, details of which we have published previously.

J. D. McArthur Co., Winnipeg, have received from the Canada Foundry Co., Toronto, recently, one switching locomotive and one mogul locomotive.

The Intercolonial Ry., between May 13 and June 15, received 6 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.

The Intercolonial Ry. has ordered 10 second-class sleeping cars, 3 of which will be built by the Crossen Car Mfg. Co., Cobourg, Ont., and 4 by Rhodes, Curry Co Amherst, N.S.

The House of Commons at its current session has voted $8,937.50 for new rolling stock, and $2,500 for new machinery, on account of the Prince Edward Island Ry., in addition to amounts already reported.

The Canadian Northern Ry. between May 15 and June 15 received the following additions to rolling stock: 250 box cars from Rhodes, Curry & Co., Amherst, N.S.; 6 second-class cars from the Crossen Car Mfg. Co., Cobourg, Ont.; and 2 consolidation locomotives from the Canada Foundry Co., Toronto.

The C.P.R., from May 13 to June 15, received the following additions to rolling stock: 2 Pacific locomotives, 5 sleeping cars, 2 baggage cars, 7 mail and express cars, 115 box cars, 2 ballast trimmers, from its Angus, Montreal, shops, and 115 Hart-Otis ballast cars from the Dominion Car and Foundry Co., Montreal.

One of our U.S. contemporaries states in a recent issue that the Temiskaming and Northern Ontario Ry has ordered two baggage and express and two mail and express cars from the Preston Car and Coach Co This is ancient history, the announcement of the order having been given was made in our issue of Nov., 1907.

The C.P.R., from May 13 to June 15, placed the following orders for rolling stock: 85 box cars, 21 flat cars, 5 stock cars, 1 baggage and smoking car, 1 Pacific type locomotive, and 1 switching locomotive, at its Angus, Montreal, shops; 6 vans at its Farnham, Que., shops, and 1 steel ore car at the Dominion Car and Foundry Co., Montreal.

The Intercolonial Ry., between May 13 and June 18, received the following additions to rolling stock, 4 refrigerator cars, 60,000 lbs. capacity from Rhodes, Curry & Co., Amherst, N.S.; 92 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.; 71 all-steel dump cars from the Dominion Car and Foundry Co., Montreal, and 3 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.

In addition to the amounts for rolling stock already voted, the House of Commons at its current session has authorized the following expenditures for the Intercolonial Ry.; Rolling stock, $193,750; air brakes to freight cars, $2,625; to exchange drawbars on freight cars, $3,875; to provide side ladders on box cars, $1,250; to provide air brake equipment, $1,312.50. Votes for $71,250 for the equipment of locomotive and car shops, of $19,375 for new machinery for locomotive and car shops, and $312.50 for Pintsch gas apparatus, have also been passed.

The Canadian Northern Ry. has ordered three 12 section sleeping cars in the U.S. They are being constructed with an improved vestibule consisting of a seat at each end of the passageway, and main room where passengers may be seated while their berths are being made up. The interiors of the cars are being finished in St. Jago mahogany with inlaid design, and the cars when completed will be among the best equipped of similar cars on the continent. Following are general dimensions, etc :

Length over sills	72′ 6″
Width over sills	9′ 10½″
Platforms	Standard steel
Couplers	Steel, solid face
Heating	Gold, duplex coil system
Lighting	Acetylene gas
Air brakes	Westinghouse
Wheels	36″, steel tyred

The Temiskaming and Northern Ontario Ry. has ordered from the Dominion Car and Foundry Co., Montreal, 50 steel underframe box cars, 80,000 lbs. capacity. Following are the general dimensions and special equipment:

Length inside	36′ 0″
Width inside	8′ 6″
Height inside from top of sills to under side of plate	7′ 10¾″
Height inside from top of rail to under side of car line	8′ 0″
Height from top of rail to top of running board	13′ 3″
Wheel base of truck	5′ 6″
Height from rail to top of flooring	4′ 1¾″
Height from top of rail to centre of drawbar	2′ 10½″
Couplers	Tower steel, 5″x7″, with Acme device complete.
Air brakes	Westinghouse automatic
Bolsters	Simplex
Side bearings	Susemihl
Journal bearings	Canadian Bronze Co.
Brake beams	Simplex
Brake shoes	Steel back
Trucks	Diamond pattern with rigid bolster

The Quebec Central Ry. has ordered 2 mogul locomotives, 140,000 lbs. in working order, for delivery in Oct., from the Canadian Locomotive Co., Kingston, Ont. Following are the general dimensions, etc.

Weight in working order, drivers	124,000 lbs.
Weight in working order, total	144,000 lbs.
Wheel base of engine, rigid	15′ 0″
Wheel base of engine, total	23′ 0″
Wheel base of engine and tender	49′ 8½″
Length over all, engine and tender	59′ 0″
Height over all, engine and tender	14′4½″
Heating surface, firebox	153 sq. ft.
Heating surface, tubes	1,741 sq. ft.
Heating surface, total	1,894 sq. ft.
Diameter of driving wheels	56″
Material of driving wheels, centres	Cast iron.
Diameter and length of driving journals	9″ x12″
Diameter of cylinders	20″
Stroke of cylinders	26″
Type of boiler	Radial stayed.
Working pressure of boiler	200 lbs.
Number of tubes	280
Diameter of tubes	2″
Length of tubes	12′ 6″
Brakes	Westinghouse.
Weight of tender, loaded	90,000 lbs.
Capacity of tank in imperial gallons	4,000 gals.
Style of tank	Level top.
Coal capacity	5 tons.
Style of truck	Railway Co.'s standard.
Diameter of wheel	33
Kind of wheel	Steel tires.
Diameter and length of journal	5″ x 9″
Brake beam	Steel.

The Reid Newfoundland Co. has recently received from the Baldwin Locomotive Works two locomotives of the 10-wheeled type, for passenger service. They will be used on the main line of the Newfoundland Ry., where grades of 2% and curves of 14° are encountered. The line is substantially built and is laid with 50-lb. rails. The track gauge is 3½ ft. In general design these locomotives closely follow standard gauge practice. The boiler is straight topped, with two rings in the barrel. The longitudinal seams are butt jointed with double welt strips. The inside firebox is of steel with crown and sides in separate pieces. Radial staying is used except at the front end of the crown, where one T bar, hung on sling stays, is employed. The mud ring is placed above the frames and is inclined toward the front, in order to give sufficient depth under the tubes. The grate is of the rocking type, with drop plate, as usually used in soft coal-burning engines. A brick arch is provided, and it is supported on studs which are screwed into the side sheets.

The cylinders are equipped with balanced slide valves, which are driven by the Stephenson link motion. The eccentric rods are straight and comparatively short, and the link blocks are connected to the rock shafts by transmission bars, which pass under the first driving axle. The guides are of forged steel of the Laird type, while the crossheads are of cast steel. The connecting rods and coupling rods are of rectangular section, the coupling rods having solid end stubs. The driving boxes are of cast steel, and the wheel centres of cast iron. The main frames are of cast steel, with single front rails of wrought iron. The frames are tied together at the rear by a cast steel foot-plate, and are amply strong in front to provide against shocks when bucking snow. Provision is made for using snow flangers, to be applied by the railway company. The tender is provided with a U-shaped tank and channel iron frame. The trucks are of the arch bar type, equipped with cast steel bolsters and chilled cast iron wheels. Automatic air brake equipment is provided on the driving and tender wheels, with train connections front and back. These locomotives are practically duplicates of a number of others supplied by the same builders several years ago, and which are in successful operation on the Newfoundland Ry. Following are the principal dimensions:

Gauge	3′ 6″
Cylinder	17″ x 22″
Valve	Balanced
Boiler, type	Straight
" material	Steel
" diameter	56″
" thickness of sheets	⅝″
" working pressure	160 lbs
" fuel	Soft coal
" staying	Radial
Firebox, material	Steel
" length	89⅝″
" width	29″
" depth, front	55¾″
" depth, back	48¾″
" thickness of sheets, sides	⅜″
" " " " back	⅜″
" " " " crown	½″
" " " " tube	½″
Water space, front	4″
" sides	3″
" back	3″
Tubes, material	Iron
" wire gauge	No. 12
" number	184
" diameter	2″
" length	12′ 0″
Heating surface, firebox	106.5 sq′
" " tubes	1,148.0 sq′
Total	1,254.5 sq.′
Grate area	18 sq.′
Driving wheels, outside diameter	50″
" " inside diameter	44″
" " journals, main	7″ x 8″
" " journals, other	7″ x 8″
Engine truck wheels, front diameter	26″
" " " journals	4¼″ x 7½″
Wheel base driving	11′ 0″
" rigid	11′ 0″
" total engine	20′ 5″
" total engine and tender	48 0″
	Specified not to exceed.
Weight on driving wheels	74,000 lbs.
" on truck, front	17,000 lbs.
" trailing wheels	91,000 lbs.
" total engine and tender, about	150,000 lbs.
Tender, wheels	No. 8
" wheels, diameter	30″
" journals	3¾″ x 7″
" tank capacity, water	2,800 gals.
" " " coal	5 tons.

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The contribution of the Government railways to the Faculty of McGill University, Montreal, towards the foundation of a school of railway engineering and transportation in general, in connection with the Faculty of Applied Science, amounting to $2,187.50, has been voted at the current session of the Dominion Parliament.

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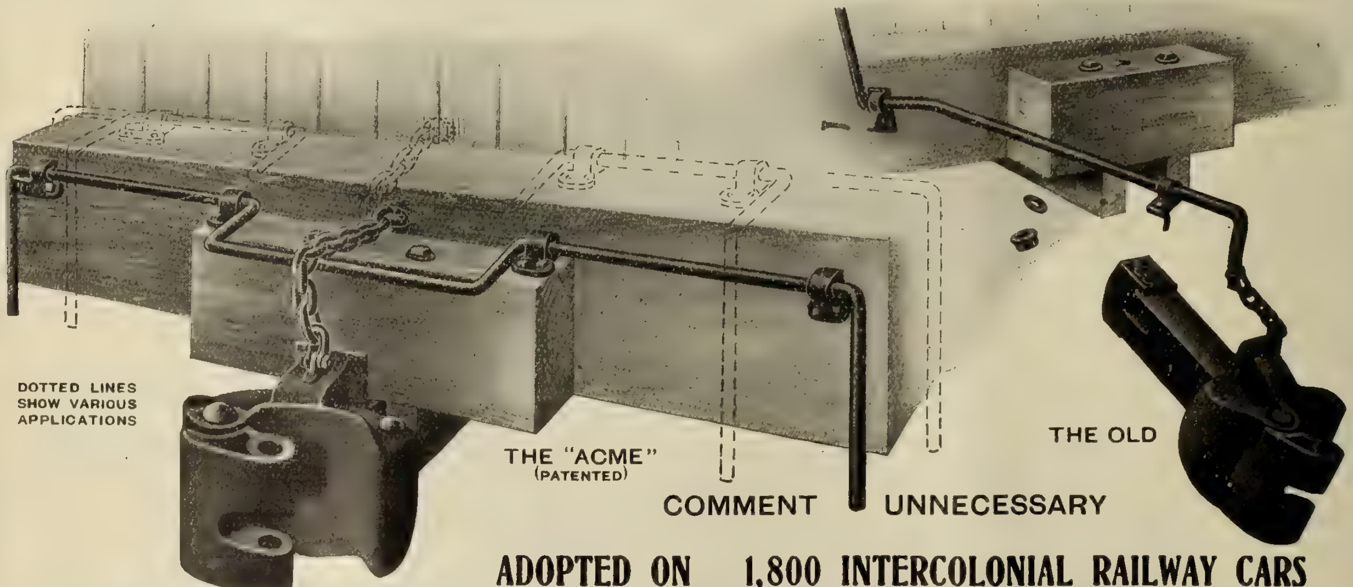

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INTERSTATE COMMERCE COMMISSION

MAINLY ABOUT PEOPLE.

Hon. J. and Mrs. Dunsmuir, of Victoria, B C., were present at a garden party given by the King June 20.

J. J. Hill, Chairman Great Northern Rd., passed through Montreal June 19, en route to Labrador, on a fishing trip.

Lord Mount Stephen has given £26,753 to the endowment fund of the Royal Infirmary of Aberdeen, Scotland.

Sir Percy Girouard, Governor of Northern Nigeria, B.W.A., has resumed his duties, after the customary leave of absence.

J. Oborne, Superintendent, Ontario Division, C.P.R., returned to Toronto, June 6, after a short trip to Great Britain.

H. D. Bayne, Manager Canadian Westinghouse Co., Montreal, returned there recently, after a two months' trip to Europe.

Sir William Van Horne had, as a guest, June 3, a son of Prince Togo, the Japanese Admiral, who is on a trip round the world.

W. Whyte, Second Vice-President C.P.R., returned to Winnipeg, May 26, from Europe, where he had been spending a short holiday.

M. Sampson, C.P.R. agent at Indian Head, Sask., was drowned through the upsetting of a canoe on Loon Lake, near that place, June 14.

H. H. Vaughan, Assistant to the Vice-President C.P.R., has been elected President of the American Association of Master Mechanics.

A press paragraph states that Lord Mount Stephen, at one time President of the C.P.R., does not now own a single share of stock in that company.

J. J. Creelman, son of A. R. Creelman, K.C., General Counsel C.P.R., was married at Galveston, Texas, June 24, to Miss K. M. Weekes.

D. McNicoll, Vice-President C.P.R., left Montreal, June 26, on the s.s. Empress of Ireland, for Liverpool, intending to be away about six weeks.

Mrs. Yollop, who died at West Toronto, Ont., May 29, was wife of Geo. Yollop, who has been C.P.R. yardmaster there for a number of years.

Miss E. T. Perry, daughter of G. D. Perry, Secretary-Treasurer Great Northwestern Telegraph Co., was married at Toronto, June 3, to F. G. Brooke.

L. F. Munsey, of the Canadian Northern Ry. auditing staff, Regina, Sask., was married at International Falls, Minn., May 30, to Miss L. Archibald.

Jas. Ferris, one of the oldest conductors in the C.P.R. service, having started with the old Brockville and Ottawa Ry. in 1872, has been superannuated.

E. A. Evans, General Manager and Chief Engineer, Quebec Ry., Light and Power Co., has been elected President of the Quebec Transportation Club.

Sir Thos. G. Shaughnessy has bought a couple of race-horses, but he has no intention of maintaining a racing stable as reported by the daily press.

W. J. Camp Superintendent C.P.R. Telegraphs, has been elected President of the Association of Railway Telegraph Superintendents for the current year.

R. Marpole, C.P.R. Executive Agent at Vancouver, B.C., spent a few days in Montreal at the end of May, prior to sailing for Great Britain on a holiday trip.

Miss E. M. Tate, daughter of the late R. F. Tate, Resident Engineer for Mackenzie, Mann & Co., Ltd., was married at Toronto, June 17, to E. D. Gates, of Hamilton, Ont.

A. R. Mann, of the Northern Construction Co., and brother of D. D. Mann, of Mackenzie, Mann & Co., Ltd., was married at Winnipeg, June 17, to Miss Malcolm.

E. Horsey, formerly chief of police at Kingston, Ont., who died there May 29, aged 70, was father of E. Horsey, Manager Lake Ontario and Bay of Quinte Navigation Co.

D. B. Hanna, Third Vice-President Canadian Northern Ry., has been elected a director of the British Empire Trust Co., the headquarters of which are in London, Eng.

J. Russell, at one time in the G.T.R. service as paymaster and fuel agent, from which position he retired to enter business in 1874, died at Matane, Que., June 20, aged 76.

W. D. Robb, Superintendent of Motive Power, G.T.R., Montreal, and Mrs. Robb, were among the passengers who sailed for England by the Allan Line s.s. Victorian June 19.

H. Foster Chaffee, Assistant General Passenger Agent, Richelieu and Ontario Navigation Co., Toronto, has recovered from his recent severe attack of pneumonia and resumed his duties.

C. H. Jackson, of the C.P.R. Accountant's Office, Winnipeg, was the recipient of a testimonial from the members of Clan Stewart, on his recent removal to Montreal, on promotion.

W. McNabb, Principal Assistant Engineer G.T.R., has been elected President of the American Railway Engineering and Maintenance of Way Association to succeed the late W. G. Berg.

J. D. Matheson, C.E., representing Warren & Wetmore, architects for the Canadian Northern and Grand Trunk Pacific Union station and terminals at Winnipeg, has taken up his residence there

C. Schreiber, Consulting Engineer to the Department of Railways, was in Fort William recently, and resumed his western journey June 17. He is inspecting the work on the G.T. Pacific Ry.

Mrs. Baker, wife of W. R. Baker, Secretary C.P.R., died at her home, 773 Sherbrooke St., Montreal, June 7, and was buried at Sherbrooke, June 10. Mr. and Mrs. Baker were married only in Oct. last.

W. W. Powe, chief clerk C.P.R. freight office, Regina, Sask., was presented with a handbag, a set of brushes, and an address on his leaving that city for a similar position at Saskatoon, June 16.

W. Downie, General Superintendent, C.P.R. Atlantic Division, St. John, N.B., left there, June 17, for British Columbia on a month's leave of absence. He spent a few days in Ontario on the outward journey.

W. E. Davis, Passenger Traffic Manager G.T.R., Montreal, was presented with a silver loving cup by his colleagues at the recent meeting of the New England Passenger Association, at Ile Perrot, Que.

W. Sutherland Taylor, who has retired from the position of Treasurer of the C.P.R., with Mrs. Taylor, will sail on the Empress of Britain, July 10, for Europe, intending to return to Canada towards the end of Oct.

Jas. J. Fletcher, formerly Superintendent of the boiler department Canada Foundry Co., Toronto, was elected Second Vice-President of the International Boilermakers' Association, at the annual convention at Detroit, Mich., June 2.

A. Kennedy, Chairman of the C.P.R. employes' general committee of adjustments, was elected an assistant chief engineer of the International Brotherhood of Locomotive Engineers, at the recent convention at Cleveland, Ohio.

Mrs. Humphry Ward, the English novelist, returned to Montreal, June 9, from a tour in Western Canada, and during the few days she remained in the city, prior to sailing from Quebec for Great Britain, was the guest of Sir Wm. Van Horne.

C. W. Redmond, lumber inspector on the staff of the Engineer of Maintenance of Way, Intercolonial Ry., was married at Moncton, N.B., June 3, to Miss C. C. Jones. The office staff presented him with a case of pearl-handled dessert knives.

W. S. Fry, whose appointment as Treasurer of the Quebec Central Ry. was announced in our June issue, was born at Lee, Kent, Eng., Mar. 18, 1874, and prior to taking up this position was engaged in general accountancy outside the transportation field.

A. R. Foster, ex-Sheriff of Carleton county, N.B., has been appointed chief magistrate to enforce the law against the selling of liquor within the prohibited zone along the Transcontinental Railway in New Brunswick, during the construction period.

Mrs. W. P. Chapman, wife of the Resident Engineer for Mackenzie, Mann & Co., Ltd., Toronto, died at Burlington, Ont., June 3, of diphtheria, after a short illness. She was the second daughter of H. C. Baker, Manager Ontario Department Bell Telephone Co., Hamilton, Ont.

Wm. C. Cunningham, statistician on the New York, New Haven and Hartford Rd., who has been appointed lecturer on Transportation at Harvard University, is a son of Wm. Cunningham, steamboat inspector, St. John, N.B., and before going to the U.S., was in the C.P.R. employ.

C. M. Hays, Second Vice-President and General Manager G.T.R., and President G.T. Pacific Ry., was one of the guests invited to meet the Governor-General and Lady Grey at the official dinner given by the Lieut.-Governor of Ontario at Government House, Toronto, May 23.

A. J. Burt, Auditor, Michigan Central Rd., Detroit, Mich., who died suddenly there June 11, aged 61, entered M.C. Rd. service as bookkeeper in 1875, and was successively: 1882 to Jan., 1890, chief clerk; Jan., 1890, to Nov., 1892, assistant auditor; since which latter date he was auditor.

G. M. Jarvis, Division Superintendent Intercolonial Ry., Truro, N.S., died suddenly at St. John, N.B., June 3, aged 58. He had been in railway service for about 30 years, and prior to his appointment as Divisional Superintendent at Truro in 1898, he was for 15 years Chief Train Dispatcher at Moncton, N.B.

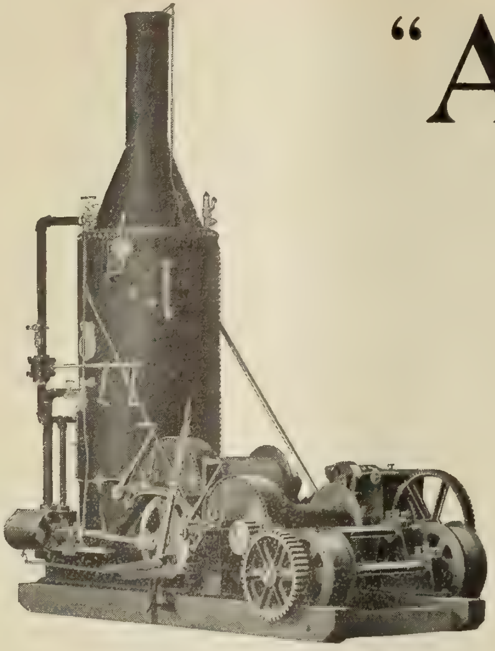
G. H. Pick, weighing inspector on the Intercolonial Ry. since 1898, has been retired under the pension fund rules. He has had 44 years of railway work in Canada, being one of the staff of the old European and North American Ry., and was for some years Assistant General Freight Agent on the Intercolonial Ry.

Beverley S. MacInnes, son of the late Hon. D. MacInnes, who was a director of the C.P.R., brother of W. R. MacInnes, Freight Traffic Manager C.P.R., and formerly Secretary to Lord Mount Stephen, was married in Toronto early in June, to Miss E. M. Macdougall, daughter of the late Alan Macdougall, C.E.

Included in the list of subscribers to the Quebec Battlefields Fund are the C.P.R. Co., $10,000; the Hudson's Bay Co., $5.000; D. D. Mann, Vice-President Canadian Northern Ry. Co., $1,000; E. B. Osler, M.P., director C.P.R., $1,000; Lord Strathcona, £200; Lord Mount Stephen, £200; and T. Skinner, director C.P.R., £50.

J. Murray Gibbon, who has been appointed advertising agent, C.P.R., London, Eng., was born at Udewella, Ceylon, April 12, 1875; graduated at Christ Church, Oxford, and, prior to his present appointment, was a journalist, having contributed regularly to the Illustrated London News and having been for two years editor of Black and White.

W. Sutherland Taylor, who has recently resigned the position of Treasurer of the C.P.R., was born at Dornoch, Scotland,



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Oct. 18, 1839, and entered railway service in Canada as Secretary during construction Toronto, Grey and Bruce Ry., now part of the C.P.R., since when he has been: 1873 to Jan. 1, 1884, Secretary and Treasurer, Toronto, Grey and Bruce Ry., and Jan. 1, 1884, to date, Treasurer of the C.P.R.

J. H. Boyle, who has been appointed Assistant Superintendent, district 3, C.P.R., Quebec, was born at Waterloo, Que., June 25, 1869, and entered C.P.R. service, as freight brakeman, April 12, 1888, since when he has been: Aug., 1890, to Nov., 1903, conductor; Nov., 1903, to Sept. 15, 1906, Trainmaster district 1, Eastern Division, Farnham, Que.; Sept. 15, 1906, to Aug. 15, 1907, Trainmaster district 3, Montreal; Aug. 15, 1907, to Jan. 1, 1908, Trainmaster district 2, Smith's Falls, Ont.; Jan. 1, 1908, to May 13, 1908, Trainmaster district 3, Eastern Division, Montreal.

C. Murphy, who has been appointed General Superintendent C.P.R. Eastern Division, Montreal, was born at Prescott, Ont., Nov. 20, 1865, and entered railway service in 1883, since when he has been consecutively: 1883 to 1885, operator; 1885 to 1890, chief operator and dispatcher; 1890 to 1899, chief dispatcher, Ottawa; 1899 to June, 1900, acting Superintendent, and June, 1900, Superintendent, Chapleau, Ont.; 1902 to Nov., 1903, Superintendent, North Bay, Ont.; Nov., 1903, to Feb., 1908, Superintendent district 2, Ontario Division, since which time he has acted as relieving General Superintendent at North Bay, Ont., and Montreal.

W. R. Haldane, who has been appointed General Freight Agent, Pacific Division, C.P.R., was born at Galashiels, Scotland, July 6, 1867. Coming to Canada in 1876, he lived in Fergus, London and Toronto, and was educated principally in Toronto public schools, Upper Canada College and Trinity Medical College. He moved to Chicago in April, 1889, and entered the service of the C.P.R. on June 1 of that year. In July, 1890, he was appointed freight solicitor to the C.P. Despatch, and in July, 1892, became chief clerk and contracting freight agent of the freight department in Chicago, retaining that position until July 1, 1901, when he was appointed District Freight Agent, C.P.R., at Detroit, Mich.

J. G. Scott, General Manager Quebec and Lake St. John Ry., was the principal guest at a dinner given by citizens of Quebec at the Chateau Frontenac, June 2, when he was presented with an address, and a testimonial consisting of a set of Crown Derby china, and several pieces of silver, in addition to an emerald and diamond ring for Mrs. Scott. The address referred to the services he had rendered to Quebec in the promotion of the Q. and L. St. J. Ry., the Great Northern Ry. of Canada, the Great Northern elevator, and the development of the trans-Atlantic steamship trade. Mr. Scott in reply reviewed the development of the country for which Quebec was the commercial centre from 1870, when the wooden railway was constructed to Gosford.

The will of the late Sir Robert G. Reid, which has been filed for probate, stipulates that his interest in the Reid Newfoundland Co. shall be sold for the benefit of the estate, in which Lady Reid is to have a life interest, and from which Miss Reid is to receive annually $10,000. On the demise of Lady Reid the estate is to be equally divided between Miss Reid, W. D., H. D., and R. G. Reid. Amongst public institutions which benefit under the will are: Queen's University, Kingston, Ont., $5,000; Protestant Hospital for the Insane, Verdun, Que., $5,000; Montreal General Hospital, $5,000; Alexandra Hospital, $5,000; Western Hospital, $2,500; Victorian Order of Nurses, $2,500. The executors named are: Lady Reid, W. D. Reid, H. D. Reid, R. G. Reid, and Sir Thos. G. Shaughnessy.

H. P. Timmerman, who has been appointed Industrial Commissioner, C.P.R., for lines east of Montreal, was born at Odessa, Ont., Nov. 6, 1856. He entered railway service in 1872, since when his record has been: 1872 to 1874, operator, G.T.R.; 1874 to 1882, train dispatcher same road; 1882 to 1887, train dispatcher, C.P.R., Winnipeg; 1887 to 1890, Assistant Superintendent same road, Port Arthur, Ont.; 1890, when the New Brunswick Ry. was absorbed by the C.P.R., to April 1901, General Superintendent, Atlantic Division, latter road, St. John, N.B.; April, 1901, to Dec., 1906, successively, General Superintendent Ontario and Quebec Division, and, on the separation of the divisions, General Superintendent, Ontario Division, Toronto; Dec., 1906, to date of present appointment, General Superintendent, Eastern Division, Montreal.

G. H. Hedge, who has been appointed Assistant Master Mechanic, Canadian Northern Ry., at Winnipeg, Man., was born at Neath, Glamorganshire, Wales, May 26, 1865, and entered railway service in 1879, as machinists' apprentice with the G.W.R., Eng. He came to Canada in 1884, since when he has been: Mar., 1884, to 1890, fitter in the C.P.R. shops at Ottawa, Schreiber, Montreal, Hochelaga, and again at Montreal, where he was leading hand; 1891 to 1893, Locomotive Foreman, Megantic, Que.; in 1893 he was transferred to Farnham, Que., and subsequently to Montreal; 1896 to 1901, General Locomotive Foreman, Farnham, Que.; 1901 to 1902, Locomotive Foreman, Medicine Hat, Alta.; 1902 to Jan., 1903, Locomotive Foreman, Brandon, Man.; Jan., 1903, to June, 1908, Locomotive Foreman, Canadian Northern Ry., Port Arthur, Ont.

H. E. Suckling, who has been appointed Treasurer C.P.R. from July 1, was born at Gibraltar, Feb. 27, 1851. He entered railway service Mar., 1874, with the Credit Valley Ry. Co., of which he was Secretary-Treasurer until its absorption by the Ontario and Quebec Ry. Co. in Oct., 1883. During the troublous financial days of the C.V.R. Co. he was appointed by the Court of Chancery as Receiver, in which capacity he acted for over a year. In Nov., 1883, he was appointed Secretary-Treasurer of the Toronto, Grey and Bruce Ry. Co., which position he still holds. He was also Assistant Secretary-Treasurer of the Victorian Ry. Co. from 1875 until its absorption by the G.T.R.; Local Treasurer of the C.P.R. at Toronto from Nov., 1883, to June, 1886; Assistant Treasurer C.P.R. at Montreal, from June, 1886, to June 30, 1908; July 1, 1908, appointed Treasurer.

B. W. Greer, who has resigned from the C.P.R. service, was born at Aldboro, Ont., Oct. 4, 1867, and entered railway service at St. Thomas as call boy for the C.P.R., Dec. 24, 1874, since which his record has been: June, 1875, to June, 1886, night operator at St. Thomas; transferred to Woodstock, and later appointed clerk in freight office at Galt; 1886 to 1887, station agent at Hillsburgh; 1887 to June, 1890, cashier and chief clerk June, 1890, to Jan., 1891, soliciting freight agent, Union Pacific Rd., at Tacoma, Wash.; Jan., 1891, to May, 1893, ticket clerk, Northern Pacific Rd., at Tacoma, Wash.; May, 1893, rejoined the C.P.R. service as ticket clerk at Portland, Ore., and was appointed Freight and Passenger Agent at Tacoma for same road in 1897; Sept., 1898, to Oct., 1901, Freight and Passenger Agent, same road, at Victoria, B.C.; Oct., 1901, to Jan., 1903, Assistant General Freight Agent, Pacific Division, same road, at Vancouver B.C.; Jan., 1903, to June, 1908, General Freight Agent, Pacific Division, same road, Vancouver, B.C.

George Olds, General Traffic Manager C.P.R. from Jan. 1, 1886, to Jan. 1, 1896, died at Montreal June 19. He was born at Stapleton, Glos., Eng., Oct. 29, 1832, and entered railway service in 1854. His record is as follows: Mar., 1854, to April 1, 1857, freight clerk and agent, Great Western Ry. of Canada; April, 1857, to April, 1864, Agent, and subsequently General Freight Agent, Buffalo and Lake Huron Rd.; Jan., 1865, to Feb., 1870, chief clerk and subsequently Assistant General Freight Agent, Chicago, Burlington and Quincy Rd.; Feb., 1870, to Mar., 1880, General Freight Agent, Kansas City, St. Joseph and Council Bluffs Rd.; Mar. to Sept., 1880, General Western Freight Agent, Chicago, Burlington and Quincy Rd.; Sept., 1880, to Aug., 1882, General Freight Agent, Chicago, Milwaukee and St. Paul Ry.; Oct., 1882, to April, 1883, Freight Traffic Manager, Missouri Pacific System; April 16, 1883, to Mar. 1, 1884, Freight Traffic Manager, and Mar. 1, 1884, to Jan. 1, 1886, General Traffic Manager, Missouri Pacific and Wabash, St. Louis and Pacific Rys.

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Recent Dominion Legislation.

The Dominion Parliament has passed the following acts affecting transportation interests in addition to those already reported.

Canadian Northern Ontario Ry.—Extending time fixed for construction, etc.

Edmonton, Yukon and Pacific Ry.—Extending time fixed for construction.

Fort William Terminal Ry. and Bridge Co.—Extending time fixed for construction.

Grand Trunk Pacific Branch Lines.—Extending time fixed for construction.

Hamilton Radial Electric Ry.—Authorizing an extension into Toronto, and extending time fixed for construction.

Manitoulin and North Shore Ry.—Extending time fixed for construction.

New Brunswick Southern Ry.—Amending acts respecting the company.

Northern Empire Ry.—Act of incorporation.

Ottawa, Brockville and St. Lawrence Ry.—Extending time fixed for construction.

Pacific and Atlantic Ry.—Reviving and amending act of incorporation.

Pontiac Central Ry.—Extending time fixed for construction.

Quebec and New Brunswick Ry.—Amending company's powers, and changing location of projected railway.

Quebec Railway, Light and Power Co.—Amending company's powers.

Vancouver Island and Eastern Ry.—Act of incorporation.

Western Alberta Ry.—Extending time fixed for construction.

◆

New Brunswick Legislation.—At the recent session of the New Brunswick Legislature, the following acts affecting transportation interests were passed: Central Ry. and New Brunswick Coal and Ry. Co., authorizing an enquiry into certain matters. New Brunswick Coal and Ry. Co.—Amending the act of 1906 in regard thereto. St. Stephen Electric Street Ry.—Renewing and amending the company's act of incorporation. Twin Tree Mines Ry.—Reviving and amending the company's act of incorporation.

The Quebec Construction Co., Ltd., has been incorporated under the Quebec Companies Act, with a capital of $25,000, and office at Quebec, for the purpose of undertaking the building of wharves, dykes, dams, sluices, bridges, steam and electric railways, telegraph and telephone lines, etc. The provisional directors are: E. Paquet, E. Parent, L. Letourneau, J. J. Gravel, J. Paquet, Quebec; E. Vezina, Chateau Richer, Que.; C. E. Lemoine, Beaulieu, Que.; and P. Parent, Beauport, Que.

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Two six-coupled double-ender locomotives with cylinders 15″ x 20″, standard gauge.

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One six-coupled locomotive with cylinders 18″ x 24″, standard gauge.
Two six-coupled locomotives with cylinders 21″ x 26″, standard gauge.

FOR FREIGHT SERVICE:
One ten-wheeled type with cylinders 18″ x 26″, standard gauge.
One ten-wheeled type with cylinders 18″ x 24″, standard gauge.
One consolidation type with cylinders 28″ x 32″, standard gauge.
Three consolidation type with cylinders 20″ x 24″, standard gauge.
One consolidation type with cylinders 19″ x 24″, standard gauge.

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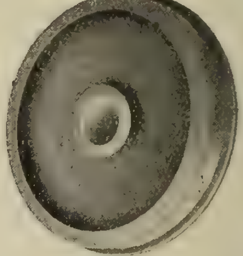

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TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Canadian Northern Ry.—G. H. Hedge has been appointed Assistant Master Mechanic, with supervision of districts 1, 2 and 3, succeeding the late G. S. MacKinnon. Office, Winnipeg.

Canadian Pacific Ry.—R. Meighen, President of the Lake of the Woods Milling Co., has been elected a director of the C.P.R., to succeed the late Sir Robert G. Reid.

H. E. Suckling, heretofore Assistant Treasurer, has been appointed Treasurer, succeeding W. Sutherland Taylor, placed on the retired list. Office, Montreal.

E. Alexander, for many years chief clerk, confidential secretary and general assistant to Sir Wm. C. Van Horne, and since then to Sir Thos. G. Shaughnessy, has been appointed Assistant-Treasurer, succeeding H. E. Suckling, promoted.

M. Hinchy, heretofore Chief Dispatcher, has also been appointed Trainmaster district 1, Eastern Division, at Farnham, Que., succeeding W. A. Rose, transferred to district 3, as truck dispatcher. It is probable that Mr. Rose will resume his position as Trainmaster after the close of the St. Lawrence navigation for the season.

H. P. Timmerman, heretofore General Superintendent Eastern Division, has been appointed Industrial Commissioner for lines east of Montreal. Office, Montreal. We are advised that his duties, which will at first be chiefly confined to New Brunswick, will be to investigate the resources of the country with the idea of producing traffic for the road, to report upon the condition and necessities of local industries and to ascertain the requirements for their development.

C. Murphy, formerly Superintendent at London, Ont., and who has acted as relieving General Superintendent on the Lake Superior and Eastern Divisions during the present year, has been appointed General Superintendent Eastern Division, succeeding H. P. Timmerman, assigned to other duties. Office, Montreal.

G. Hodge, now Superintendent Montreal Terminals, has been appointed Superintendent district 3, Eastern Division, to succeed W. J. Singleton, who is to be placed on the retired list, and J. R. Gilliland, now agent at West St. John, N.B., succeeds Mr. Hodge.

S. Buchanan, heretofore Superintendent of Terminals and Ferries, Windsor, Ont., has been appointed Superintendent Upper Lakes Steamship service, succeeding Lincoln Smith, assigned to other duties at Montreal. Office, Owen Sound, Ont. Mr. Buchanan will retain his jurisdiction over the Windsor ferries, the agent there having charge of other work previously done by Mr. Buchanan.

A. C. Harshaw, who has been in charge of the train service on construction of the Bolton-Romford branch, has been appointed Trainmaster on the same. Office, Parry Sound, Ont.

A. O'Connor has been appointed acting Roadmaster. Office, Parry Sound, Ont.

E. Olson, heretofore Contracting and Export Freight Agent, Chicago, Ill., has been appointed District Freight Agent, Detroit, Mich., vice W. R. Haldane, promoted.

R. Armstrong, heretofore agent Vancouver, B.C., has been transferred to Fort William, Ont., as General Agent, succeeding R. E. Larmour, promoted.

We are officially advised of the correctness of the report mentioned in our last issue that W. P. F. Cummings, General Agent in charge of Atlantic Steamship Agency, C.P.R. Passenger Department, Winnipeg, had resigned and was succeeded by H. M. Tait, heretofore his Assistant.

E. G. Trump, heretofore Chief Dispatcher at Winnipeg, has been appointed Chief Dispatcher at Brandon, Man., vice R. C. Wilton, transferred to Kenora, Ont. W. G. Preston, who was Chief Dispatcher prior to R. C. Wilton, is on leave of absence and on resuming duty will take a position as truck dispatcher.

R. J. Hood has been appointed Roadmaster Rapid City section, Miniota and Lenore branches and Brandon yard, succeeding J. Canty, transferred to Saskatoon, Sask. Headquarters, Brandon, Man.

The line between Lanigan and Saskatoon, and Saskatoon and Asquith having been opened on June 15, C. S. Maharg, Superintendent at Saskatoon, Sask., is now in charge of operating as well as construction on district 5, which embraces Lanigan to Saskatoon, including Lanigan, 76.5 miles; Saskatoon to Asquith, 26 miles; Asquith to Hardisty, under construction, 206.2 miles, and Lanigan to Leslie, under construction, 58.6 miles; total mileage, 367.3 miles.

T. Edmundson, Roadmaster at Lanigan, Sask., has had his jurisdiction extended to Neudorf, Sask., M. Lynch being Roadmaster in charge of Pleasant Hills section, including Neudorf Terminals.

R. W. Drew, who, since the transfer of W. C. Bowles to Winnipeg in Mar. last, has been acting General Freight Agent, Kootenay and Boundary districts, at Nelson, B.C., has been appointed District Freight Agent. Office, Saskatoon, Sask.

R. E. Larmour, heretofore General Agent Fort William, Ont., has been appointed General Freight Agent, Kootenay and Boundary district, succeeding W. C. Bowles, transferred to Winnipeg in March last. Office, Nelson, B.C.

W. R. Haldane, heretofore District Freight Agent, Detroit, Mich., has been appointed General Freight Agent, Pacific Division, vice B. W. Greer, resigned. Office, Vancouver, B.C.

H. B. Walkem, heretofore Resident Engineer district 2, Pacific Division, has been appointed Assistant Division Engineer, succeeding R. A. Bainbridge, promoted to the Esquimalt and Nanaimo Ry. Office, Vancouver, B.C.

F. P. Wilson has been appointed Resident Engineer district 2, Pacific Division, Vancouver, B.C., succeeding H. B. Walkem, promoted.

G. F. Diekroeger has been appointed Westbound Contracting Agent for the C.P. Despatch, at St. Louis, Mo., succeeding A. S. Williams, resigned.

Duluth, Rainy Lake and Winnipeg Ry.—G. R. Hall is reported to have been appointed Traffic Manager in charge of all freight and passenger traffic. Office, Duluth, Minn.

Esquimalt and Nanaimo Ry.—R. A. Bainbridge, heretofore Assistant Division Engineer, C.P.R., Vancouver, has been appointed Division Engineer in charge of maintenance and construction, E. & N.R. Office, Victoria, B.C.

Grand Trunk Ry.—C. E. Tenney, heretofore city passenger and ticket agent, Quebec, has been appointed passenger and ticket agent at Portland, Me., succeeding J. Lawlor.

G. H. Stott, heretofore agent at Point Levi, Que., and freight agent at Quebec, has been appointed city passenger agent at Quebec and St. Roch, Quebec, succeeding C. E. Tenny, transferred.

R. P. Smallhorn has been appointed agent at Point Levi, Que., succeeding G. H. Stott, transferred.

The following agents have been appointed: Portland (passenger), Me., C. E. Tenny; Norton Mills, Que., H. A. Dunne; Britannia Mills, Que., W. J. Brunelle; Point Levi, Que., R. P. Smallhorn; Quebec, Que., R. P. Smallhorn; Huntingdon, Que., J. O. Michaud; St. Paul, Que., W. J. Mallett; Cornwall, Ont., T. W. Graham; Port Union, Ont., G. G. Carson; Madoc Junction, Ont., T. W. Belch (temporary); Sundridge, Ont., J. J. Carey; Sebringville, Ont., W. J. Weir; Ravensworth, Ont., E. J. Chartrand; Maple Lake, Ont., G. J. Saunders (caretaker). Outside Agent, Quebec and St. Roch, Que., G. H. Stott.

A joint circular, issued by the Passenger and Freight Traffic Managers of the G.T.R., and the Vice-President and Manager of the Canadian Express Co., states that F. C. Salter, heretofore European Traffic Agent, has been appointed European Traffic Manager of the G.T.R. system and subsidiary lines, and of the Canadian Express Co.; temporary headquarters, 20 Water St., Liverpool, Eng.

Intercolonial Ry.—J. T. Hallisey, Chief Train Dispatcher, Truro, N.S., has been appointed acting Superintendent, Halifax and St. John district, on account of the death of G. M. Jarvis, Superintendent.

I. F. Avard, heretofore clerk in the Weighing Inspector's Office, has been appointed Weighing Inspector, succeeding G. H. Pick, retired. Office, Moncton, N.B. H. P. LeBlanc has been transferred from the Traffic Audit Department to the position heretofore occupied by Mr. Avard.

Lackawanna-Grand Trunk Line.—I. W. Gantt, Division Freight Agent G.T.R., Toledo, Ohio, has also been appointed Manager L.-G.T. Line, vice W. Craigie, acting Manager. Mr Gantt's office as Division Freight Agent, G.T.R., remains at Toledo, and the L.-G.T. Line office remains at Chicago. In announcing this appointment in our June issue, Mr. Gantt's name was inadvertently spelt Gautt.

Lehigh Valley Rd.—W. B. Wheeler, heretofore General Agent, Passenger Department, Buffalo, N.Y., has been appointed General Western Passenger Agent. Office, Buffalo, N.Y.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—G. A. Clifford is reported to have been appointed City Passenger Agent at Cleveland, O.

National Transcontinental Ry. Commission.—C. O. Foss, heretofore Assistant District Engineer, has been appointed District Engineer, St. John, N.B., succeeding G. C. Dunn, resigned.

H. Longley and H. Balkam, heretofore Divisional Engineers at Edmundston, N.B., and Moncton, N.B., respectively, have been appointed Assistant District Engineers at St. John, N.B.

J. A. Laferriere has been appointed Resident Engineer, Eastern Division, Quebec.

Reid Newfoundland Co.—W. D. Reid, heretofore Vice-President, has been elected President, and G. H. Massey, director, in place of the late Sir Robt. G. Reid. H. D. Reid has been elected Vice-President.

◆

The C.P.R. Co. has made a donation of $10,000 towards the fund for the purchase of the Quebec battlefield.

During April, 32 railway employes were killed and 45 injured. Of the fatalities, 12 were due to dynamite explosions, 4 each to being run over, to drowning, and to snow or rock slides; 2 each to derailments, and to being struck by train, and one each to a collision, to a fall, to being struck by a passing object, and to falling material. Of the non-fatal accidents, 11 each were due to dynamite explosions and to avalanches, 8 to collisions, 4 to falls, 2 each to being caught between cars, to falling material, to explosions, to machinery and to being run over, and one to a derailment.

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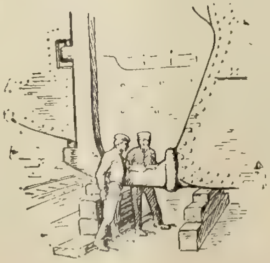

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CANADIAN FACTORY, ST. CATHARINES, ONT.

A Railway to Hudson Bay.

Speaking at St. Catharines, Ont., May 30, the Minister of Railways said: "Some people are talking about a Hudson Bay route to Liverpool. It might be done, and we might ship western goods from Fort Churchill instead of Fort William. The former is as near Liverpool as Montreal. We might have a railway to that point and so have a quick route for three months in the year. In the remaining months the vessels could call at our other ports, but meanwhile observe that at Fort Churchill the wheat would be placed in the ocean vessel. At Fort William it has yet a long journey to go, and much handling to undergo, before it reaches the sea." The evidence of the Hudson's Bay Co., of whalers and of successive Government expeditions in regard to the navigability of Hudson Straits, is to the effect that these waters are available for commercial purposes for at least three months in each year, while some say they can be used for four and five months.

The Premier in reply to a question in the House of Commons, June 10, said it was the intention of the Government to introduce legislation regarding a railway line to Hudson Bay, and to provide aid towards the construction of other lines of railway. No intimation was given as to the date when the proposal would be outlined, but the general impression is that in lieu of the Government construction and ownership of such a line, as was originally suggested, it is now the intention to secure the construction of the line by a private company. This intention will probably be carried out by means of an agreement with the Canadian Northern Ry. to complete the line which it is at present constructing towards Hudson Bay to Fort Churchill, the Government giving a cash subsidy in lieu of the land subsidy voted a number of years ago, and guaranteeing a portion of the bonds to be issued. The agreement, it is stated, will provide for the control of rates over the line by the Government, and running rights over the line for other railways upon equitable terms.

The Minister of the Interior introduced a bill in the House of Commons June 23 to consolidate and amend the Public Lands Act for the purpose of creating a new source of revenue to aid in the construction of a railway to the north. The act at present gives settlers the right of pre-emption over certain lands at $3 an acre, in any township in the west where a railway has not already acquired more than eight sections, and it allows settlers who have already acquired homesteads the right of pre-emption of an additional quarter-section anywhere in the west. The amendments now proposed provide for a restriction of the area over which the right of pre-emption shall be exercised. In explaining the bill, Hon. F. Oliver said the area included some 28,000,000 acres, and it was reasonable to hope that 5,000,000 acres of this could be sold at $3 an acre. The amount thus realized would be applied to the building or aiding in building the 500 miles of road necessary to complete the Hudson Bay Ry. from the Saskatchewan River to the Bay, the unofficial estimated cost of which was $30,000 a mile, $15,000,000 in all, or the amount that the sale of 5,000,000 acres, as mentioned, would realize. It is not to be taken for granted that the building of the road would have to await the sale of this land. The plan outlined would create the revenue to meet the responsibility of building the road, and would also release the mortgage, so to speak, of 12,800 acres to the mile of a land grant for this road under an old act, the present policy being against the land grant.

The Canadian Northern Ry. has already a line constructed to Pas Mission on the North Saskatchewan River, and has surveys in a more or less advanced stage for the remaining 480 miles required to be constructed to the proposed terminus at Fort Churchill. A Government engineer has made a preliminary survey of the route, and his report is that there is nothing to prevent a line being constructed at a reasonable cost from the Pas Mission to Fort Churchill. The Government is having plans of Fort Churchill harbor prepared, and a member of the surveys branch of the Department of the Interior has gone to that port to survey the town site. This will be on the east side of the Churchill River, opposite the ruins of old Fort Prince of Wales, and across the river from the Hudson's Bay Co.'s trading post.

A. Cotton, one of the engineers on the Transcontinental Railway surveys at North Bay, Ont., has been dispatched in charge of a survey party to make a survey from Hudson Bay to a point on the line which is being constructed by the Transcontinental Railway Commission. (June, pg. 417.)

Ten Years Hence.

(From the Winnipeg Tribune.)

"Sir William B. Lanigan, Vice-President of the C.P.R., arrived in the city last night in his private car. The old man looks well and expressed himself as being glad to get back to Winnipeg. His car came through attached to the fast freight from Montreal. Sir William has not lost interest in the freight department, and always travels that way. He says he can make better time, and quotes the fact as proof that he left Montreal on Wednesday, two hours behind passenger train 97, and arrived here 3 hours and 17 minutes ahead of her. Those who remember the handsome private car, 'Onagainlanigan,' put at Sir William's disposal when he became Vice-President of the C.P.R., will hardly recognize it now. He says it never felt just right, so he has had it remodelled after his own ideas. Most of the windows are boarded up. A poop deck has been added to the rear end of the roof. The car has been painted bright red and the name replaced with the number 23,711. The inside conveniences have been exchanged for a bunk and a bridge table, with appurtenances. Since Lord Seepiar, better known as Sir William Whyte, has taken up his residence in England, old 'Sir Bill' has come to be looked upon as the most typical old Westerner left us, and his visits to our city are always appreciated."

Board of Railway Commissioners.—For the maintenance and operation of the Board of Railway Commissioners the Dominion Parliament at its current session has passed a vote of $78,750, and $8,750, to pay expenses in connection with reference to cases before the Commission. During June the Board completed its sittings at Toronto, and issued orders in a number of cases. A sitting was held at Ottawa June 23, and early in July the application of the G.T.R. to do certain train work on Sundays, which is claimed by the Lord's Day Alliance to be a contravention of the Lord's Day Act, will be heard at Ottawa.

The C.P.R. has granted a site at Swift Current, Sask., for a hospital.

New Haven and C.P.R. Agreement.

The Railway World, Philadelphia, published the following recently: "Without notifying any of the trunk lines and apparently without any attempt at a conference, the New York, New Haven and Hartford Rd. has filed a tariff with the Interstate Commerce Commission, to become effective June 10, by which it enters into traffic relations with the Canadian Pacific Ry. exclusively for westbound business. By the terms of this agreement it excludes the Grand Trunk and diverts to the C.P.R. traffic now carried by the trunk lines. The proposition is to open a new line from southern New England to the West via the northern gateway in connection with the Boston and Maine and the C.P.R. To do this the New Haven applies the differential rates from New York and Boston points to business moving from its own territory and from piers 45 and 50, East River, and its Harlem stations. From New York points these rates for the six classes are respectively 10, 8, 6, 4, 3 and 5c., and from Boston points, 5, 4, 3, 3, 2 and 1c. The opening of such a new differential route means a reduction, it is stated, of from 40c. to $1 a ton. The object is to get on the same basis as rail and water lines in conjunction with the Merchants and Miners' Transportation Co. These roads, as well as the G.T.R., will be cut out entirely from the New England business, not a pound of which, as an interested official is reported to have said, will move over their tracks. They will be unable to help themselves unless they engage in a rate war that, once begun, might develop into a lengthy conflict."

Being interviewed on the subject, the C.P.R. Fourth Vice-President said: "All there is to the whole thing is that the C.P.R. has made an arrangement with the New Haven and Hartford for an interchange of freight traffic through the Boston and Maine on the same basis of rates as to and from points on the Boston and Maine. There can be no objection on the part of any of the trunk lines to any such arrangement, and it looks as though the U.S. railways and newspapers have been making a mountain out of a molehill. There is not the slightest prospect of a rate war or any other trouble over this agreement, which is simply a domestic arrangement between the two lines. The agreements will go into effect on June 10, and under it the C.P.R. will take from the New Haven freight for points on its line, while the New Haven will do the same for the C.P.R., the Boston and Maine being the means of communication. There will be no reduction of rates or anything that can affect the interests of other trunk lines, since the interchange of freight will be made at the authorized freight rate schedules. The U.S. newspapers seem to have got the idea that there was some arrangement between the two roads for special freight rates, but this is entirely erroneous. The arrangement is exactly similar to that the C.P.R. has with the Boston and Maine, and other roads, and there is nothing exclusive to it, nor anything that could be translated as inimical to the interests of any other trunk lines."

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The Toronto Viaduct Question.

The arguments of counsel upon the question of the power of the Board of Railway Commissioners to order the railway companies to join with the city council in the construction of a viaduct along the water front of Toronto, were concluded June 6, and on June 10 Chief Commissioner Mabee gave judgment against the companies, which was concurred in by Commissioner Mills as follows:

"Objection is taken to the jurisdiction of the Board to order the elevation of the railway company's tracks along the Toronto waterfront. The railway tracks are along the Esplanade, and that is a street, or highway. Under sec. 227, if the company applies for leave to construct the railway along a highway it must file a plan and profile with the Board, showing the portion of the highway affected, and upon that application the Board is expressly empowered to make provision for the protection, safety and convenience of the public, and has authority to require all such measures to be taken, as under the circumstances appear to the Board best adapted to remove or diminish the danger or obstruction arising or likely to arise from the construction of the railway along the highway.

"Now, if this were an application of the companies for leave to locate and construct their lines along the Esplanade, I think it is perfectly clear that the Board could impose as a term of granting such leave that the track should be elevated or carried upon a viaduct. If I am right in holding that the Board has power upon an original location to require elevation of tracks, it seems to me clear it has the like power notwithstanding the railway is already constructed along the highway.

"Sec. 30 provides that 'the Board may make orders . . . . with respect to the . . . structures and works to be used upon the railway so as to provide means for the due protection of . . . the public.'

"Sec. 3 of the Railway Act is as follows:

"'This act shall, subject to the provisions thereof, be construed as incorporate with the special act, and unless otherwise expressly provided in the act where the provisions of this act, and of any special act passed by the Parliament of Canada, relate to the same subject matter, the provisions of the special act shall, in so far as is necessary to give effect to such special act, be taken to over ride the provisions of this act.'

"Now, is there a 'special act' in existence, relating to 'the same subject matter' as that dealt with in secs. 237 and 238, viz., protection, safety and convenience of the public; if there is, then it is said that the provisions of the special act over-ride those of the general act.

"It seems to me, reading the whole of s.s. 28 that the fair meaning of the words 'with special reference to such railway' is with respect to the 'construction or operation' of the railway dealt with earlier in the same clause, and that an act merely declaring an agreement to be in force is not necessarily an act dealing with the construction or operation of the railway merely because some of the many clauses of the agreement deal with the matters above indicated. It appears to me that if this tripartite agreement still remains a private contract, it cannot be regarded as a special act for the wide and far-reaching purposes for which that argument is advanced.

"The early history of the waterfront and the growth of the foothold of the railways there was elaborately argued before the Board. I have read the arguments since the hearing, and am of the opinion that there is nothing in all that has been said or advanced to take away the authority of Parliament to confer upon this Board authority and jurisdiction to deal with the subject matter of this application, and that such authority has been conferred, and in saying this I am not overlooking the authorities under which the railway titles upon the Esplanade from time to time developed. On April 22, 1905, the city entered into an agreement with the G.T.R. which by an Act of the Ontario Legislature of the same year was declared valid and binding, for the construction by the railway company of a new union passenger station and yards. This agreement is based entirely upon the operation of the railway tracks upon the level; it provides for the city closing certain streets, a foot bridge from Front St. to Lake St. over the tracks, changes and repairs to York St. bridge, and many other provisions, entirely inconsistent with track elevation as now proposed. Upon this agreement the G.T.R. has acted, and in good faith expended enormous sums of money. Application for the order for the construction of the Yonge St. bridge was made by the city, the validity of the order has since been upheld by the Court of Appeal, it is still held by the city—and under it the railways are required to construct a bridge over the tracks.

"I mention these matters because it was strongly argued that the city had estopped itself from making the present application; that the policy adopted, the contracts entered into, the work done and money expended by both city and railways upon the lines of protection by overhead bridges upon the well-known legal doctrine of estoppel, prevented the city departing from that mode of grade separation, and making application now for an entirely different system. I am of opinion that this argument would be entitled in a court of law to prevail, and that the course taken by the city in the past would absolutely prevent this application from succeeding, but this Board is not a court of law, and no doctrine of estoppel is applicable or binding.

"The paramount object of the sections under consideration, that which overshadows all and before which everything must give way, is the protection, safety and convenience of the public in the matter of grade separation, and no town or city council by any sort of municipal mismanagement, folly or ignorance can estop itself or prevent the Board taking any step or making any order, otherwise within its jurisdiction, for the protection, safety and convenience of the public. The question of whether the separation of grade along the waterfront is to be accomplished by viaduct or overhead bridges is not now being considered; it is that of jurisdiction only if after all the evidence has been given, every interest considered, and all sides heard, the Board deems the interests of the public require departure from the policy adopted by the city upon this matter; it has it in its power to entirely protect the railway interests, and doubtless will have full regard to all expenditures made by the railways upon the faith of contracts with the city, so that no injustice will be done to, or loss fall upon, the railways by reason of variation of plans made, structures or buildings erected, lands purchased or money expended, which would be of no avail consequent upon a changed policy.

"I have given full consideration to the argument that there are no streets running to the waterfront. The Court of Appeal has held the contrary as to Yonge St., and I have no doubt most, if not all, the other passages to the water are highways within s.s. 11 of sec. 2 of the act, where a highway is declared to include any way of public communication.

"The Board will continue the hearing of this matter at once if the parties so desire, or await the result of an appeal from this opinion to the Supreme Court, if that course is decided upon."

Prior to the conclusion of the case the city council put in, at the suggestion of the Chief Commissioner, a formal application for an order to compel the city to construct the viaduct. There has been a great deal of discussion upon the question not only in railway, but in business circles, the railway companies taking the position that a viaduct would be unnecessarily expensive, and C. M. Hays, Second Vice-President and General Manager G.T.R., says the application is altogether unreasonable.

The question of the viaduct came up in the House of Commons June 11, when the Minister of Railways said: The Mayor of Toronto waited on him and asked that the law might be so amended that the Board of Railway Commissioners would have power to order the construction of a viaduct. He replied that he was assured that the Board already had the power to do almost anything with railways. A great many people were of opinion that Parliament had already given the Commission too much power. If Parliament adopted all the amendments to the act which were asked for the Board would have power to do almost anything that any person could conceive of, with reference to railways. The Chairman of the Commission, after hearing all the arguments, decided that the Commission was a tribunal established for the purpose of settling differences, and consequently it had a right to deal with the question of viaducts.

Montreal Board of Trade Transportation Bureau.

At a recent meeting of the Montreal Board of Trade, T. J. Drummond, Chairman, announced that a Transportation Bureau had been formed to conserve the interests of Montreal as a distributing point, import, export and domestic; to send representatives to meetings of the Board of Railway Commissioners when matters affecting Montreal interests are to be discussed; to facilitate adjustments through overcharges, delays, loss or damage to goods, demurrage, classifications, etc., and to generally advise members as to their rights under the Railway Act. It was, he stated, the intention to have the Bureau act as an intermediary between the business interests and the transportation companies, and the services of a competent railway expert, who was thoroughly conversant with freight tariff matters would be secured, whose duty would be to attend all meetings of the Railway Commission where Montreal's interests were affected, to watch the question of freight tariffs, to supervise the preparation of complaints and petitions to be laid before the Commission, and generally to keep in touch with railway matters which might have any connection with the port. A committee consisting of T. H. Newman, Chairman; H. W. Aird, R. M. Ballantyne, G. Esplin, G. B. Fraser, J. R. Kinghorn, A. Orsali, J. Quintal, and R. J. Younge, was appointed to set the new department in working order. The annual subscription is $25, and upwards of 200 members have joined the organization.

* * *

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◆

The British Columbia Government has announced that no licenses will be granted for the sale of intoxicating liquor in construction camps along the G.T. Pacific Ry. within the province; and that no license will be granted at Prince Rupert either.

The board of conciliation which has had under consideration the claims of the Cumberland Ry. and Coal Co.'s employes for increased wages and altered conditions of labor, has filed an award, the majority being against the claims on all points, while the men's representative disagreed with the majority on all but one point. The company declined to take any part in the proceedings.

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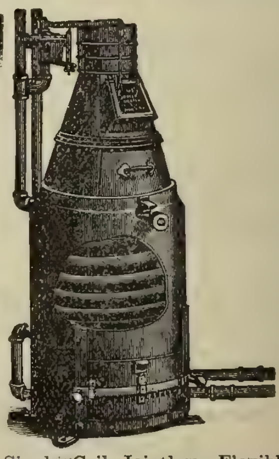
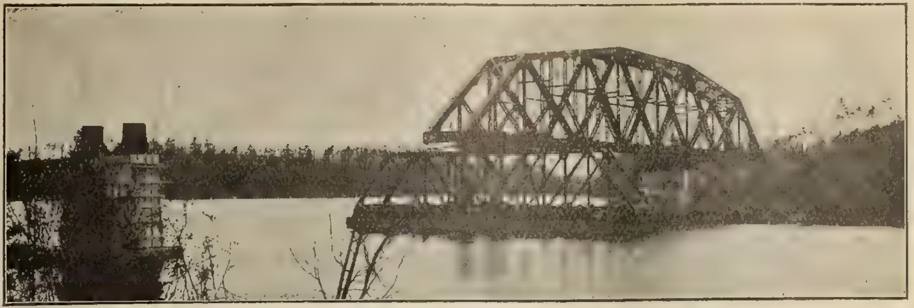


Single Coil Jointless Flexible Steel Fire-proof Heater.

Erection of French River Bridge.

By C. N. Monsarrat, M. Can. Soc. C.E.



The new C.P.R. branch line, extending from Romford, Ont., about six miles east of Sudbury, on the company's main Transcontinental line, southerly to Bolton Jct., where it connects with the Owen Sound section, about 21 miles north of Toronto, includes a number of important bridges, one of the largest of which is that crossing the French River, about 43 miles south of Romford. This bridge is located at a point where the river has a width of approximately 550′, while the depth of the water for about three-fifths of the crossing averages 90′. The character of the bottom is rock, with about 10′ of soft mud overlying it. The current is, however, very slight, being only about 3-10 of a mile per hour.

In order to avoid the great expense of building a pier in the deep water, it was found necessary to locate the first pier 415′ south of the north abutment, where a good foundation was obtained in about 48′ of water. The dimensions of this pier are 9′ x 30′ at the top under the coping, which is 2′ thick, with an overhang of 4½″ on all sides, and has a batter of 1 in 12 on each side for a depth of 30′, making the bottom of the shaft on the footing 14′ x 30′, the ends being vertical. The foundation, or footing, is 21′ x 33′ 10″ long by 40′ high; the total height of the pier is 72′, and it was designed to resist the tractive forces from the spans supported by it. There is a second and smaller pier located 67′ 2″ farther south in about 15′ of water, the shaft of which has a batter on each side of 1 in 24; the total height of this pier is 44′, and the dimensions at the top are 6′ x 16′ under the bridge seat, or coping, which overhangs 3″ on all sides. The abutments at both ends are located at the water's edge. The north abutment could not be built farther south on account of the rock at this point, which is very steep on the west side.

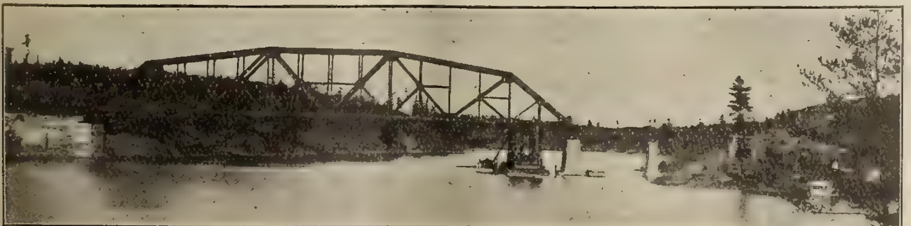
In laying out the substructure three independent triangulations were made. Reference points were located on the tops of the hills on either side of the river, on three parallel lines, one along the centre line, and one at each end of the piers; these points were high enough to permit of an instrument being set up on one side and a foresight being taken on the opposite shore at any time during the progress of the work. After the abutments and piers were located, they were checked by steel tape rigged as follows: A ring bolt was set in the rock at the north shore of the river directly on the centre line of the bridge, and from this a ⅛″ diameter steel cable was stretched across to the south shore and made taut by block and tackle. To prevent sagging of the cable, floats, having their tops at exactly the same level as the ring bolt, were anchored in the river at frequent intervals to support it. Rings were attached to this cable every 4′ and a 600′ steel tape passed through them.

The difficulties encountered in getting plant and material for the substructure to the site were exceptionally arduous. Everything had to be brought in from French River Village, on Georgian Bay, at the mouth of the French River. First, rapids had to be overcome, then a portage of a mile and a half, then the plant was again floated up the Pickerel River (which had its difficulties too) a distance of 23 miles, to what is called the Horse Shoe Falls. There the outfit was elevated some 25′, loaded again and transported some 12 miles over a swift and rough course to the bridge site. Broken stone and sand used in making the concrete was hauled 12 or 15 miles through a wilderness by teams in winter. The contractor's plant consisted of the usual concrete outfit of picks, shovels, concrete mixer, blacksmithing outfit, and other things incidental thereto; one submarine drill, complete for preparing the foundations; several sets of drill steel averaging 45′ in length, one 30′ high steel frame with sliding carriage for drill, truck wheels, and operating platform. This outfit was operated by hydraulic pressure furnished by a large high pressure pump, having the necessary attachments and connections; two 30 h.p. boilers, two 32 h.p. hoisting engines with derricks and swinging gear complete; one 1¼-yard orange peel bucket; two 20 h.p. hoisting engines with derricks; four large scows, 24′ x 60′, and two tugs; two sets of diving apparatus, in addition to many other odds and ends of machinery. The drilling machinery was placed on the scows, which were anchored at the pier sites. After holes were drilled, they were shot with dynamite, and the loose rock removed by means of the orange peel bucket, or a derrick with chains and grappling hooks at the bottom, until the foundation had been properly benched and levelled off. Holes were then drilled in the rock about 4′ apart, and 2″ diameter steel dowels, 6′ long, set in them, and projecting about 3′ up into the concrete footing. The timber caisson for pier 1 was built about 48′ high and well reinforced with timber braces. Heavy canvas was attached around the bottom on the inside, and after the caisson was sunk into position, the divers went down and rolled this out. Concrete in sacks was then deposited around the edges to make it conform to the contour of the rock and so prevent any wash or current through the pier. Mortar, of a constituency of one part of cement to two parts of sand, was then deposited to the amount of 50 cubic yards, followed without any intermission by the work of concreting, which was carried on by means of bottom-dumping buckets. The concrete, up to water level, was mixed in proportions of one part of cement, two of sand, and four of broken stone, and above water one part of cement, three of sand, and five of broken stone. Similar methods were followed in constructing the second and smaller pier. The quantities of concrete in the substructure aggregate 3,020 cubic yards, as follows: North abutment, 913 c.y.; no. 1, or main pier, 1,421 c.y.; pier 2, 226 c.y.; and south abutment, 460 c.y.; rock excavation, 337 c.y.; earth, 141 c.y.

The above layout required one 415′ span, over the deepest part of the crossing, which was designed as a riveted, subpanelled, through Warren truss with inclined top chords (weighing 2,563,362 lbs.) and two 60′ deck plate girder spans (weighing together 126,540 lbs.) over shallower water to the south abutment. The superstructure was designed in accordance with the requirements of C.P.R. 1905 specification, providing for a live load of two typical consolidation engines coupled together, weighing 337,000 lbs. each, followed by a uniform train load of 4,000 lbs. per lineal foot.

Probably the most interesting feature in connection with this work was the erection of the main truss span. On account of the great depth of water, it was not possible to build falsework and erect the span in its proper place, so after due consideration of several possible schemes of erection it was decided to erect the span on the north approach embankment, on the centre line of the bridge (produced) and launch it forward by supporting the forward end on a large scow, and sliding the rear, or north end, on a skidway of greased rails. This embankment, immediately north of the north abutment, was a new fill consisting mainly of boulders, coarse gravel, and sand, with a maximum height of about 25′ against the abutment, running out to the natural surface of the ground about 100′ north. The width of the embankment at subgrade was 16′, and in order to provide a proper bearing for the skidway, it had to be widened to 26′. On this specially prepared roadbed two parallel skidways, about 316′ long, were built, 10′ centre to centre, each consisting of railway ties about 15″ on centres, with a 12″ x 12″ timber 16′ long, every 10′, to tie the two skidways together. On these ties were laid five lines of 12″ x 12″ longitudinal timbers, over which was laid a flooring of 3″ x 12″ planks, supporting 7 lines of 80-lb. rails, laid with joints staggered and securely spiked and bolted together.

The steel work was accordingly erected on the embankment, using a specially-designed traveller, consisting of two 60′ boom derricks of 10 tons capacity each, mounted upon a timber framework designed to travel upon rails gauged 14′ centres, the platform of the traveller being placed 12′ 7″ above top of rail, so that lorry cars, loaded with bridge material, could readily pass underneath on standard gauge railway track, and the material be picked up by the traveller booms. Each of the 60′ boom derricks was handled by separate double-drum Beatty engines, placed at the rear end of the traveller and forming part of the 20 tons of counterweight on each side required to provide for the uplift due to loading the boom derricks. The assembling of the span on the embankment was, in itself, quite a difficult operation, on account of the large size of the members to be handled, some of them weighing as much as 40 tons. Before any work was started, the order in which each member was to be erected was fixed and clearly shown on the erection diagram. In order to permit of supporting the forward end of the span, by



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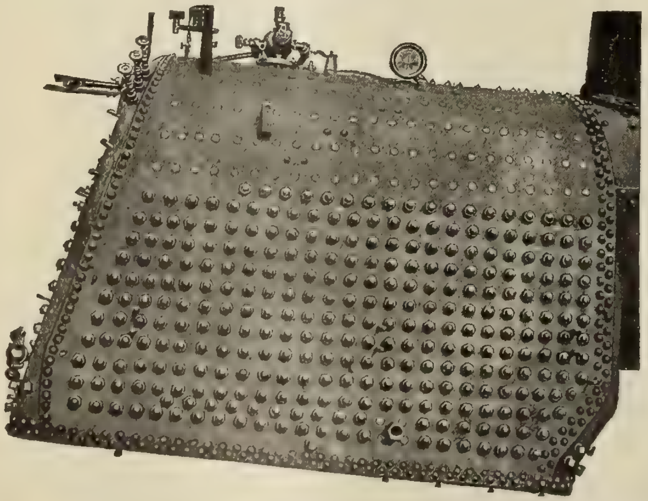

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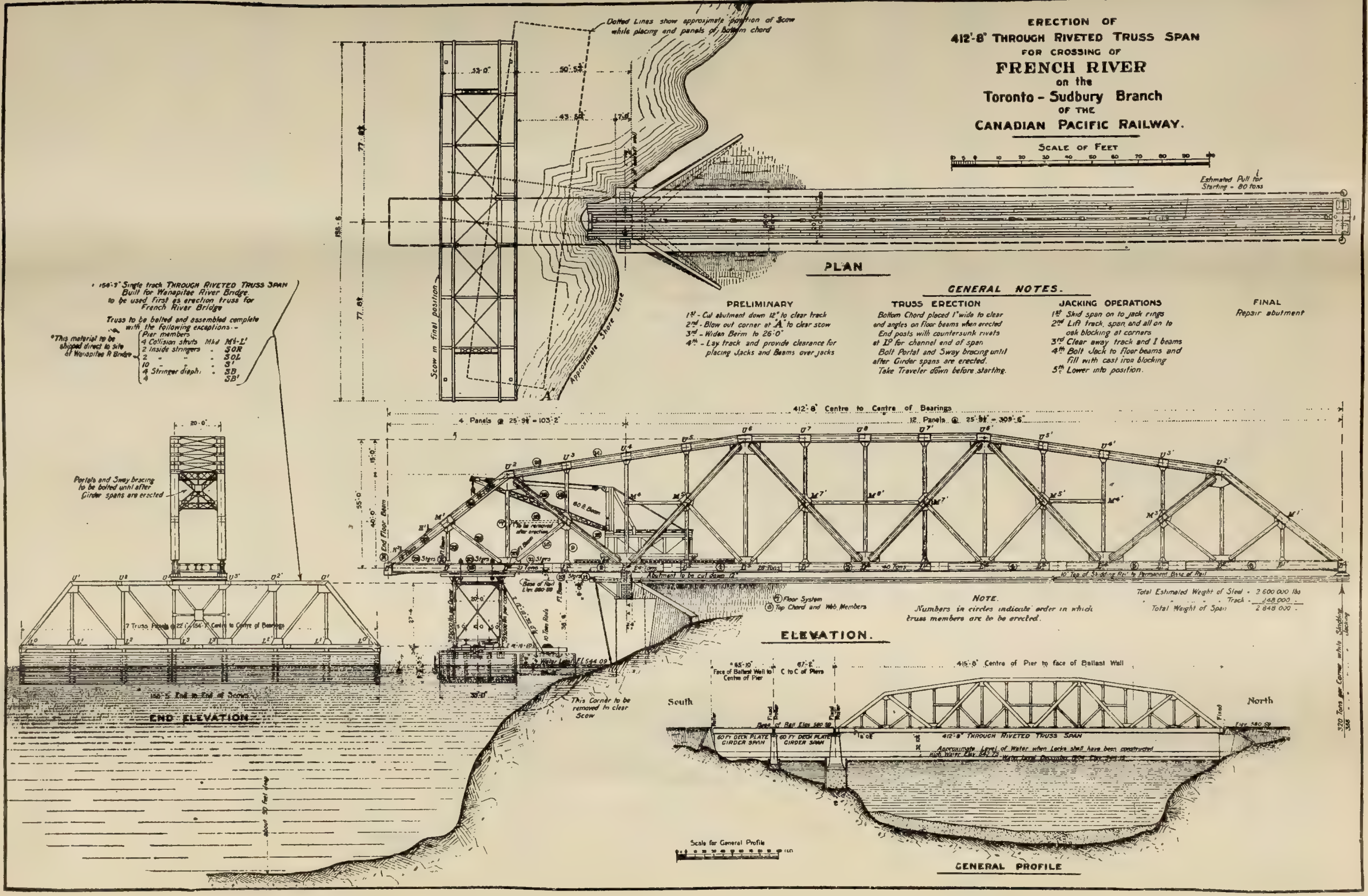

ERECTION OF
412'-8" THROUGH RIVETED TRUSS SPAN
FOR CROSSING OF
FRENCH RIVER
on the
Toronto - Sudbury Branch
OF THE
CANADIAN PACIFIC RAILWAY.

GENERAL NOTES.

PRELIMINARY
1st - Cut abutment down 12" to clear track
2nd - Blow out corner at "A" to clear scow
3rd - Widen Berm to 26'-0"
4th - Lay track and provide clearance for placing Jacks and Beams over jacks

TRUSS ERECTION
Bottom Chord placed 1" wide to clear end angles on floor beams when erected
End posts with countersunk rivets at L0 for channel end of span
Bolt Portal and Sway bracing until after Girder spans are erected.
Take Traveler down before starting.

JACKING OPERATIONS
1st Skid span on to jack rings
2nd Lift track, span and all on to oak blocking at corners
3rd Clear away track and I beams
4th Bolt Jack to floor beams and fill with cast iron blocking
5th Lower into position.

FINAL
Repair abutment

NOTE.
Numbers in circles indicate order in which truss members are to be erected.

Total Estimated Weight of Steel - 2 600 000 lbs
" " " " Track - 248 000 "
Total Weight of Span 2 848 000 "

* 154'-7" Single track THROUGH RIVETED TRUSS SPAN Built for Wanapitae River Bridge, to be used first as erection truss for French River Bridge

Truss to be bolted and assembled complete with the following exceptions:-
*This material to be shipped direct to site of Wanapitae R Bridge
Pier members
4 Collision struts Mkd M4-L'
2 Inside stringers " SOR
2 " " " SOL
10 " " " S'
4 Stringer diaph. " SB
4 SB'

Scale of Feet
0 5 10 20 30 40 50 60 70 80 90 100
Estimated Pull for Starting = 80 tons
Dotted Lines show approximate position of Scow while placing end panels of Bottom chord
Scow in final position
Approximate Shore Line
53'-0"
50'-53"
43'-53"
77'-8½"
77'-8½"
155'-5"
A
PLAN
412'-8" Centre to Centre of Bearings
4 Panels @ 25'-9¾" = 103'-2"
12 Panels @ 25'-9¾" = 309'-6"
U2 U3 U4 U5 U6 U7 U8 U7' U6' U5' U4' U3' U2'
M1 M3 M5 M6 M7 M8 M7' M5' M4' M3' M1'
L0 L1 L2 L3 L4 L5 L6 L7 L8 L7' L6' L5' L4' L3' L2' L1' L0'
55'-0"
40'-0"
15'-0"
End Floor Beam
60 lb Beam
To be removed after erection
Stgrs
28 Tons
40 Tons
Abutment to be cut down 12"
10' Top of Skidding Rail to Permanent Base of Rail
⑦ Floor System
⑧ Top Chord and Web Members
Base of Rail Elev. 580.00
Ft. Beam
10 Tons Rails
El. 544.09
This Corner to be removed to clear Scow
ELEVATION.
320 Tons per Corner while Skidding
Jacking
20'-0"
Portals and Sway bracing to be bolted until after Girder spans are erected
U1 U2 U3 U3' U2' U1'
L0 L1 L2 L3 L2' L1' L0'
7 Truss Panels @ 22'-1" = 154'-7" Centre to Centre of Bearings
155'-5" End to End of Scows
END ELEVATION
about 30 feet deep
*65'-10" Face of Ballast Wall to Centre of Pier
67'-2" C to C of Piers
415'-8" Centre of Pier to face of Ballast Wall
South
North
Fixed
Base of Rail Elev. 580.00
60 FT. DECK PLATE GIRDER SPAN
60 FT. DECK PLATE GIRDER SPAN
412'-8" THROUGH RIVETED TRUSS SPAN
Approximate Level of Water when Locks shall have been constructed
High Water Elev. 542.73
Scale for General Profile
GENERAL PROFILE

THE CANADIAN PACIFIC RAILWAY CO.'S BRIDGE AT FRENCH RIVER, ONT., ON THE TORONTO-ROMFORD BRANCH. FOR DESCRIPTION SEE PAGES 499 AND 503.

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the scow, it was necessary to erect it with its south end projecting over the water about 103′. The bottom chords and floor system, excepting that portion overhanging the water, were first placed in position by means of a self-propelling derrick car, ties were then laid for temporary track on the steel stringers, and the traveller erected with which the balance of the span was assembled.

In placing the two end bottom chord sections on top of the stiffening span, it was necessary to place the scow in a temporary position shown in dotted lines on the accompanying plan, so that they could be placed by the traveller, the forward trucks of which could not be run out beyond the panel point resting over the bridge seat on the abutment. To do this it was necessary to blast out some of the rock projecting out under the water, to clear the northeast corner of the scow. When these chords were placed the scow was returned to its correct position and the erection of the overhanging portion, as a cantilever, from the portion of the span previously erected upon the embankment, was proceeded with. In order to place the scow at the proper elevation under the projecting end of the large span, it was necessary to depress it about 4′ by pumping in water. As this water ballast would render the scow unstable transversely until it took a bearing under the 415′ span, it was necessary to use a small balancing scow, which was placed at the north side of the large scow and secured to the latter and the stiffening span, by means of diagonal and horizontal struts, and was equipped with counterweight and adjusting screws to provide for any raising or lowering of the large scow. The general dimensions of the large scow, referred to, which was built at the site, were: Length, 155′; 33′ beam, and 12′ deep; made in two sections for convenience in launching. It was built of 12″ x 12″ timbers for the ends; bulkheads and intermediate frames, 6″ x 12″; sheeting on the sides, 4″ x 12″ for the bottom, with joints staggered and secured to the framing with ⅝″ x 12″ lag screws. The bulkheads were spaced 22′ 1″ centre to centre to conform with the panel points of the 150′ through riveted truss span, which was erected on the scow as a stiffening span, each panel point being blocked on a cross bulkhead. All seams in the sheeting, up to about 2′ above load water line, were caulked with oakum.

On completion of the assembling of the large span, the traveller was taken down, the ties used as temporary floor removed, and all field connections, excepting end portals and sway bracing, were riveted before launching was started. The field rivets, of which there were approximately 60,000, ⅞″ diameter, were driven by means of pneumatic riveting hammers, a compressed air plant having been installed for the purpose. The scow was equipped with boiler and double-drum hoisting engine, as well as a centrifugal pump with 8″ suction and 6″ discharge pipes, and a sluice arrangement located over the double bulkhead forming the ends of the two component parts of the scow by which the water pumped in could be controlled and directed into either half of the scow. Each intermediate bulkhead had an 8″ x 8″ hole near the bottom, so as to equalize the water in each compartment.

The load from the south end of the 415′ span, and the 150′ stiffening truss supported by the scow, was about 1,000 tons. The load from the north end of the span, amounting to about 640 tons, was transmitted to the skidway through the two large fixed end cast iron shoes (used temporarily for the purpose), placed 10′ centre to centre, under the end floor beam, which had been designed with a special view to such use. This arrangement of the castings left a clear space under the truss bearings for landing of the span on oak blocking over the bridge seats preparatory to its being jacked down to its bearings. The oak blocking was required for the temporary support of the span at an elevation about 8′ 5¼″ higher than its final position, this height being necessary to permit the skidway to pass over the parapet wall of the abutment. Between the aforementioned cast iron shoes and the skidway rails was placed a ⅞″ steel plate, large enough to include both castings, with strips riveted to its under side to form guides to engage the rails on the skidway.

When the scow was in position under the overhanging end of the main span in front of the north abutment and transverse to the centre line of the bridge, two guide anchors were located on the opposite shore at an angle of 45°. Holes were drilled in the rock and 3½″ steel bars were grouted in a vertical position. To each of these anchors were secured a two-sheave steel block carrying four lines of ⅝″ wire cable, forming the forward guy lines, which were wound up simultaneously on the drums of the hoisting engine, on the scow, as the span moved forward, steadying the floating end from any effect of wind or current. The tackle used to haul the 415′ span into position, consisted of two specially-constructed steel pulley blocks, having 14 sheaves each, through which was reaved a ⅝″ diameter steel wire cable 1,000′ long, with a fall line leading back to the drum of a hoisting engine located on the land at the north end of the skidway. This engine was a 32 h.p. Beatty double-drum hoisting engine, with two cylinders 8″ x 12″, boiler 41″ in diameter by 108″ high, and capable of pulling 8,000 lbs. on a single line. One of the large blocks was secured to the skidding plate under the castings, and the other to the rear end of a string of bottom laterals belonging to a 250′ through span designed for the crossing of the Pickerel River, a short distance south of the French, consisting of two angles 6″ x 4″ x ½″ each, used as pulling links. These were in turn secured by a pin to a box girder supported by struts in front of the north abutment. Each section of these laterals was about 30′ long, and when the two large blocks were brought together one or two sets of lateral links were removed and the blocks overhauled. When the last section was reached it was removed, and the forward block secured by the pin direct to the box girder.

When everything was in readiness, on the evening of Oct. 27, 1907, the scow was pumped out by means of the centrifugal pump, until the span was raised off the blocking. When this occurred it was found that there still remained a foot of water in the scow, showing that an ample margin of buoyancy had been allowed. At 8 a.m. on the 28th, the engine was started, and with the assistance of a slight shove from two 40-ton hydraulic jacks, the large span started on its way, moving on the well-greased skidding rails at the rate of 4′ to 6′ per minute. Considerable time was lost owing to the inability of the small boiler of the hoisting engine to keep up a sufficient steam pressure and also in the overhauling of the very heavy tackle. The actual time occupied in moving the span was 3 hours, and in overhauling tackle, etc., 4 hours. The span was landed on its blocking at 4.05 p.m., without a hitch of any kind. Trouble had been anticipated with settlement of the skidway on the new dump in view of the 640-ton concentrated moving load passing over it, but in no case was the settlement over 6″, and it was uniform at both sides, the greatest variation of the span from the level being about ⅛″ in its width. So smoothly did the span move that it was possible to set it in its final location with the engine alone, without the assistance of jacks, and by means of the steering control afforded by the forward guy lines the span was within ¾″ of its proper alignment when landed on the main pier on the south side of the river.

The lowering of the span to its final bearings on the bridge seats was accomplished by means of two specially-constructed 500-ton hydraulic jacks. After the span was landed on the wooden blocking, the skidway castings and skidding plate were removed and cast steel cap plates were bolted to the under side of the floor beam, these plates being turned out to fit over a cast steel disc plate 23″ diameter by 3½″ thick, placed on top of the plunger of each jack; between the bottom edges of these discs and the shoulders of the jack cylinders were placed a number of ¼″ steel plate half ring shims, as a safety precaution against accident should anything go wrong with the jacks; in which event the weight would be transferred to the massive jack cylinders. The jacks were each placed on blocking consisting of three super-imposed steel cylinders filled with concrete, over which were placed a number of cast iron cellular blocks 2′ 10″ in diameter by 3½″ thick. The ¼″ shim plates were removed one at a time as the span was lowered, so that in no case was there left a space greater than ¼″ between the under side of the disc and the jack shoulders. Before the last of these shims was removed the span was landed on the oak blocking, the jacks released and one or more sections of cast iron blocking removed, the jacks pumped up, shims replaced, and the operation repeated until all the cast iron blocking had been removed, when one of the concrete-filled cylinders was taken out, the casting and shims replaced, and so on until the span was landed on its permanent shoes. The oak blocking was also removed as the span was lowered, the top of it being kept high enough to free the jacks while shims were being adjusted. When the span had been lowered about 4′ at one end, the jacks were transferred to the other and similar operations carried out there. That end, however, was lowered right down to the shoes before the jacks were returned to the end first lowered.

The bridge was designed by the C.P.R. Bridge Department, at Montreal, C. N. Monsarrat, Engineer of Bridges. The substructure was built by the Toronto Construction Co., of Toronto, under supervision of F. S. Darling, Division Engineer of Construction, while the steel work was manufactured and erected by the Canadian Bridge Co., of Walkerville, Ont. A. L. Colby was manager of construction, and C. Prettic general foreman in charge of steel erection.

I believe that this is the longest and heaviest single track fixed span yet built and erected in Canada, or ever erected by the end launching method.

The foregoing paper was read at a meeting of the Canadian Society of Civil Engineers recently.

◆

Old-Time Railway Economy.

A. D. Davidson, of Davidson & McRae General Agents of the Canadian Northern Ry.'s Land, Immigration and Industrial Department, has framed in his Toronto office a letter received by him a little over 30 years ago, when he was a station agent at Blair, Wis. It reads:

Green Bay & Minnesota Railroad Co.,
Timothy Case, President.

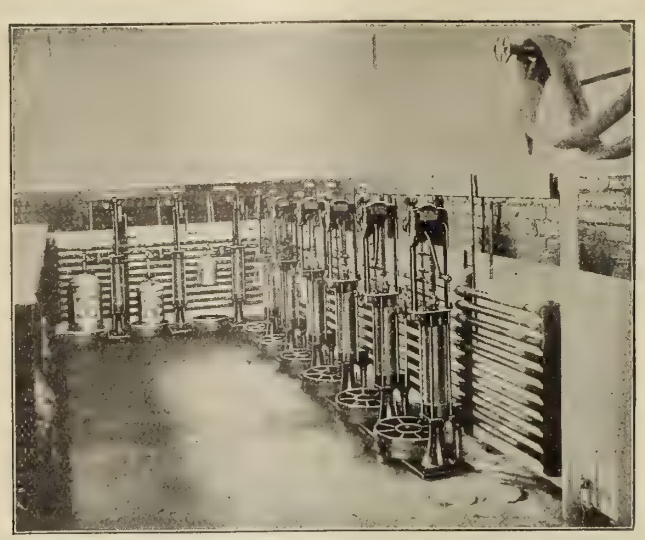
March 7, 1878.

A. D. Davidson, Agent:

Dear Sir,—Your requisition of yesterday is recd. In reply I am surprised that you require so many pencils and blotting paper. I find you have made demand for such things enough to supply an ordinary school district. One pencil will last me a year. What is fair or right harms no one.

Yours truly,
Timothy Case.

P.S.—Your own future advance depends on frugality.



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Orders by the Railway Commissioners.

For previous orders see page 465.

4850. June 10.—Authorizing Silica Brick and Lime Co. to construct trestle over Esquimalt and Nanaimo Ry.

4851. June 16.—Approving location of C.P.R. Virden-McAuley branch, mileage 5 to 16.5.

4852. June 16.—Authorizing C.P.R. to construct a spur line from its main line, on lot 71, con. 2 N.D.R., mileage 28.84, across lot 70, con. 2N, across road allowance between concessions 2 and 3, and across lots 70 and 69, con. 3N, to lot 68, con. 3N.D.R., Brant tp., Bruce Co., Ont.

4853. June 16.—Authorizing R. A. Darling, of Sheho, Sask., to erect telephone wires across the C.P.R. on north line of sec. 9, tp. 30, range 9, w. of 2nd mer.

4854, 4855. June 11.—Authorizing C.P.R. to open for traffic its Bolton-Romford branch, from mileage 92.5, at Bala to mileage 226, at Romford.

4856. June 2.—Authorizing C.P.R. to construct spur to Sherwin-Williams Co.'s premises, Montreal.

4857. June 2.—Authorizing C.P.R. to construct a spur line from its South Bank branch on St. Patrick St., Montreal, across the same, and along Atwater Ave. to a point of connection with the Sherwin-Williams Co.'s private siding.

4858. June 17.—Approving New Brunswick Southern Ry. by-law for carriage of traffic on its line.

4859. June 16.—Amending order 4752 of May 14, 1908, so as to provide for installation and operation by National Transcontinental Ry. of home signals where the same crosses the C.P.R. near Theriault station, N.B.

4860. June 16.—Authorizing the National Transcontinental Ry. to cross with its line the several existing highways between mileage 190 and 241, in Springfield and Whitemouth municipalities, Man.

4861. June 16.—Authorizing Montreal St. Ry. to operate its cars over C.P.R. at the intersection of Papineau Ave., Montreal.

4862. June 2.—Authorizing C.N.Q. Ry. to cross the C.P.R. east of Lorette, Que., between mileage 0 and 1 of the Q. and L. St. J. Ry. Jct. spur.

4863. June 2.—Authorizing Ontario Power Co. to erect wires across the G.T.R. near Welland, Ont.

4864. June 16.—Amending order 4667, dated April 16, 1908, authorizing the C.P.R. to construct its railway across road allowance on its Pleasant Hills branch at mileage 423.0.

4865. June 2.—Ordering the C.P.R. to remove the barbed wire or other obstruction placed across or in the vicinity of the crossing over its Atlantic and Northwestern Division, connecting Crescent Ave. and Fenwick Ave., Montreal West.

4866. June 16.—Directing Montreal Terminal Ry. Co. to file its standard freight and passenger tariffs for the approval of the Board, within 30 days.

4867. June 17.—Authorizing C.P.R. to construct bridge 2013 on its Sault Ste. Marie branch, Ont.

4868-4870. June 17.—Authorizing York and Carleton Telephone Co. to erect wires across the C.P.R. at three points in Carleton County, N.B.

4871-4878. June 17.—Authorizing C.P.R. to re-construct the following bridges: no. 2.28 and 54.0 on its Woodstock section, N.B.; no. 53.7 on its Gibson branch, N.B.; no. 47.9 on the Esquimalt and Nanaimo Ry.; no. 33.2 on its Nominingue extension, Que.; no. 87.62 on its Sault Ste. Marie branch, Ont.; no. 53.7 on its Woodstock section; and no. 101.2 on its Swift Current section, Western Division.

4879. June 17.—Authorizing C.N.Q.R. to take part of lot 448, St. Stanislas parish, Que.

4880. June 17.—Amending order 4766 of May 27, 1908, by extending time within which to instal electric bell at crossing of C.P.R. at Dorchester St., Quebec, from June 1 to July 1, 1908.

4881. June 12.—Authorizing village of Papineauville, Que., to construct street across C.P.R.

4882. June 17.—Approving location of Brandon, Saskatchewan and Hudson Bay Ry. station at Brandon, Man.

4883. June 17.—Dismissing complaint of J. A. Charette, Mayor of Notre Dame des Neiges, Que., against Montreal Park and Island Ry. regarding failure of company to file standard passenger tariffs. See page 475.

4884 June 17—Ordering re-classification of military freight tariffs with reference to field guns, ambulances, and projectiles for artillery. See page 475.

4885. June 18.—Approving Quinze and Blanche River Ry. location through part of Guigues tp., Que., across Quinze River, through adjoining Indian reserve, Nedelec tp., and through Casey, Harley and Dyment tps., Ont., to New Liskeard, covering mileage of 18.77; also rescinding order 4782 of June 2, 1908, approving location of Q. & B.R.R.

4886. June 16.—Ordering C.P.R. to give B.C. Sugar Refining Co. certain rates on sugar. See pg. 475.

4887. June 18.—Authorizing C.P.R. to construct a branch line in Calgary, Alta.

4888. June 18.—Authorizing G.T.P. Ry. to operate the portion of its line from opposite Saskatoon, to Scott, Sask., a distance of about 115 miles, for the purpose of moving a party of settlers.

4889. June 17.—Directing C.P.R. to instal interlocking plant with derails where it crosses the G.T.R. in Lennoxville, Que., as per order 4754 of May 12, 1908, also rescinding order 4633 of April 15, 1908, authorizing C.P.R. and G.T.R. to operate their trains over this crossing without being brought to a stop.

4890. Mar. 17.—Authorizing City of Peterborough, Ont., to construct a highway as a continuation of George St., Peterborough, across the G.T.R.

4891. June 19.—Directing C.P.R. to construct and maintain a suitable crossing where its line intersects road allowance between ranges 15 and 16, tp. 18, w. 2nd mer., Sask.

4892. June 9.—Authorizing Malahide and Bayham Telephone Co-operative Association to erect wires across C.P.R. in Eden, Ont.

4893. June 9.—Authorizing Provincial Light, Heat and Power Co. to erect transmission line over Montreal Park and Island Ry. near Rockfield station, G.T.R., Que.

4894. June 19.—Authorizing Western Canada Cement and Coal Co. to erect telephone wires across C.P.R. at Exshaw, Alta.

4895 to 4901. June 19.—Authorizing Bell Telephone Co. to erect telephone wires across G.T.R. and C.P.R. at various points in Ontario.

4902. June 16.—Ordering G.T. Ry. to instal, within four months, an electric bell with automatic cut-off, at intersection of G.T.R. with Main St., Forest, Ont.

4903. June 19.—Authorizing Bell Telephone Co. to erect wires across the G.T.R. at Queen St. West, Ottawa, Ont.

4904. June 23.—Authorizing C.P.R. to construct bridge over Old Man River on its Western Division.

4905. June 23.—Authorizing New Brunswick Telephone Co. to erect wires across C.P.R. at Green Road, Carleton County, N.B.

4906. June 23.—Authorizing C.P.R. to reconstruct bridge 3.8 on its Moose Jaw section, Western Division.

4907. June 23.—Authorizing New Brunswick Telephone Co. to erect wires across C.P.R. near Siegas, N.B.

4908. June 23.—Authorizing C.P.R. to open for passenger traffic the portion of its Pheasant Hills branch between Saskatoon and Lanigan, Sask., 17.9 miles.

4909. June 23.—Authorizing C.P.R. and C.N.Q.R. to operate their trains over crossing near Lachevrotiere, Que., without being brought to a stop.

4910. June 24.—Authorizing C.P.R. to construct spur to the Western Canada Cement and Coal Co.'s premises, Mitford, Alta.

4911. June 23.—Authorizing C.P.R. to put in operation interlocking plant installed upon Lachine Canal bridge near Highlands, Que.

4912. June 4.—Authorizing G.T.R. to take lands at Jordan station, Ont., for enlarging station grounds.

4913-4915. June 24.—Authorizing Ontario Power Co. to erect transmission line across M.C. Rd., Stamford and Crowland tps., Ont.

4916. June 24.—Authorizing City of Brantford, Ont., to lay water main under G.T.R. at Jex St

4917. June 24.—Authorizing C.P.R. to construct spur to M. Webber's premises, Didsbury, Alta.

4918. June 24.—Authorizing C.P.R. to construct spur to the Great West Coal Co.'s premises, Roche Percee, Sask.

4919. June 24.—Authorizing C.P.R. to construct spur to Shearer, Brown and Wills' premises, Montreal, cancelling order 4847 of June 2, 1908.

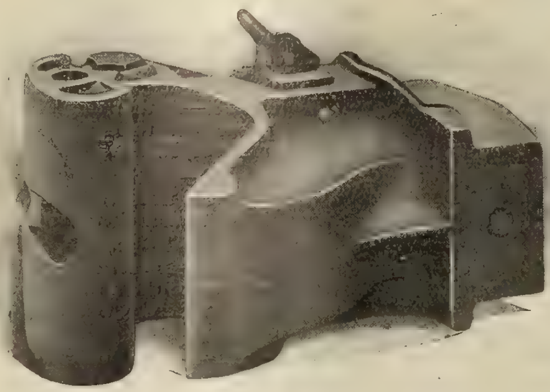
Railway Storekeepers' Association.

At the annual meeting in Chicago, at the end of May, papers by several officials of Canadian railways were read. J. H. Callaghan, General Storekeeper, C.P.R., read the following paper on "Is it practical and economical to operate a railway on a 30-day stock of materials?"

This is a live subject at the moment; railway companies are scrutinizing money values tied up and current items of expenditure more closely than has been the practice for some years past. The general storekeeper with a large stock balance well up in the millions is being pressed from all quarters for information as to why he requires to carry such a large stock, cannot it be reduced, and to what extent, etc.? Every new order or requisition he places with the general purchasing agent is subject to a most searching analysis, and all with a view to minimizing the stock carried and purchased to the lowest notch consistent with safety.

From the foregoing, then, it is safe to assume if the conditions covered by the title of this paper are possible they are to be desired, and the officers, under whose jurisdiction they properly come, should exercise the greatest personal interest to bring them about. "The railway storekeeper, carrying stock to the extent of say, $3,000,000, with an average monthly turnover of 64%, is doing better than the other fellow who is carrying a similar stock balance value and disbursing monthly say 28%, all conditions being equal."

Now it follows if it be practicable in the true sense it should be largely economical; but, you say, is it practicable? I say yes, under certain conditions; on the other hand, under less favorable environment, partially



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so; while certain features which present themselves from time to time in the handling of railway supplies make its practicability barely possible; but, under all conditions, it is practicable to get nearer to this desired state than exists in a general way to-day on most of the large railway systems. The conditions which make its practicability at all possible, as outlined in the following three illustrations, are somewhat along these lines:

1st. On the first day of a given month you have on hand material of all kinds sufficient to meet requirements for 30 days; on the same date, or as soon as possible thereafter, you have requisition placed with the general purchasing agent for another 30 days' requirements, all of which you must have delivered to you not later than the first day of the month following; in short, you have a 30 days' stock on hand and a 30 days' stock on order the first day of each month. The railway which is to be favored with this aimed-at system of material stock carried would not necessarily require to be a small one, as the same favorable results might safely apply to both small and great systems alike, providing, "they purchase all their material finished ready for issuance," "manufacture nothing," "make repairs only," "are largely normal in their business," and "are favored with best market conditions."

2nd. Where you are manufacturing—say, as in the case of operating one, two or three foundries—there are a number of obstacles which stand in the way of your carrying stock only sufficient to take care of 30 days' requirements. Materials carried for the successful operating of foundries are usually based on three months' limit, and in many cases where water or all-rail freight rates affect the cost of foundry raws, it is economical practice to carry items of stock in excess of the three months' needs. This same condition would apply where switch material is manufactured, or for the matter of that, any large items of manufactured material, so that while all of the other favorable conditions which go to make the theoretical side of the subject appear practicable as outlined in my first illustration, these latter features governing as they do not only railways where manufacturing is gone into; but, manufacturing industries generally would not permit of its adoption in full; hence, this second clause of my argument is made to show wherein the benefit of the 30 days' stock can only be arrived at in part.

3rd. The conditions under which the 30 days' stock would be altogether impracticable is where not only repairs are taken care of, as referred to in the earlier part of the paper, or manufactured material forms a large item of shop output; but, where construction of locomotives, sleeper, parlor, dining, box and flat cars is gone into on a large scale, this latter situation makes the 30-day stock of material not only impracticable, but impossible.

During the past nine months there has been a very healthy movement made in the direction of reducing stocks of material carried by the various railways represented here, and I am sure if you officers, who are mainly responsible for this effort which has and is continuing to be made, will enter into free and untrammelled discussion of this subject, citing where possible particular cases of reduction and the consequent economy accruing to the respective railways which you are representing, much good will result not only to the individual member but to the association as a whole. The managements, yes and the directors of many of the large railways of this country, are watching this economic feature closely, and it is the storekeeper who can best supply the material needs of his company at the minimum cost who will win.

J. H. Callaghan, General Storekeeper C.P.R., was elected President.

ELECTRIC RAILWAYS.

Canadian Street Ry. Association.

The annual meeting was held at Niagara Falls, Ont., May 29 and 30. In the unavoidable absence of the President, E. A. Evans, General Manager of the Quebec Ry., Light and Power Co., the Vice-President, J. E. Hutcheson, Superintendent Ottawa Electric Ry., occupied the chair.

The Secretary-Treasurer, Acton Burrows, presented a report reviewing the Association's work during the year, and showing what had been accomplished in regard to legislation, the relations of companies with the Ontario Ry. and Municipal Board, the transportation of letter carriers, taxation of electric railways, zone system of fares for interurban lines, etc.

It was decided to appoint a committee on legislation, with representatives from each province, to watch legislation affecting the interests of electric lines.

The principal portion of the three sessions which were held during the meeting were devoted to a series of important and interesting topical discussions covering a wide range of subjects relating to construction, maintenance and operation of electric railways.

The following were elected officers, etc., for the current year: President, J. E. Hutcheson, Superintendent Ottawa Electric Ry.; Vice-President, D. McDonald, Manager Montreal St. Ry.; Secretary-Treasurer, Acton Burrows, Managing Director, Railway and Marine World; Executive Committee, J. Anderson, Manager Sandwich, Windsor and Amherstburg Ry.; N. P. Baker, Division Superintendent International Ry.; P. Dubee, Secretary Montreal St. Ry.; H. M. Hopper, Secretary St. John, N.B., Ry.; W. R. McRae, Master Mechanic Toronto Ry.

The representatives attending the meeting went from Niagara Falls to Olcott Beach, N.Y., on the evening of May 29, in the private car Ondiara, as the guests of the International Ry. Co., and were entertained at dinner at the Olcott Inn, N. P. Baker presiding.

Passengers on Front Seats of Open Cars.

The accident which occurred on the Ottawa Electric Ry. on May 24, was enquired into on behalf of the Ontario Railway and Municipal Board by J. F. H. Wyse, C.E., of Toronto, who in the course of his report said:

"From the statements I took and enquiries I made, I conclude that J. T. Carrol, the motorman, is a steady, sober, industrious, capable and experienced employe. The front of the car where the motorman stood was occupied by passengers sitting on the front seat. In the face of imminent danger the passengers on the front seat hampered and disconcerted the motorman; he failed to keep his presence of mind and lost control of his car. This I find to be the cause of the accident. In this connection I deem it my duty to state that it is as important to have the motorman free from embarrassment and distraction while attending to his duties on an open car of this type as on closed cars, where he is within a vestibule and where passengers are not allowed to ride. I would therefore recommend that the front seat on open cars be abolished, so that a motorman in the discharge of his duties shall not be liable to have his mind distracted or his movements hampered by passengers, either sitting down or standing up. A reasonable space should be allotted to the motorman for the discharge of his duty."

On May 28, the Ontario Railway and Municipal Board sent a circular to the electric railway companies under its jurisdiction, calling their attention to Mr. Wyse's recommendations as above quoted, and stating that the Board would sit in Toronto on June 5, and that unless good cause be shown to the contrary, it would proceed to pass a regulation prohibiting electric railway companies from allowing passengers to occupy the front seat or any portion of the space on the front of open motor cars. The matter was fully discussed at a meeting of the Canadian Street Ry. Association at Niagara Falls, Ont., on May 29 and 30, when it was unanimously decided that the proposal to pass such an order be opposed.

At the sitting on June 5, the Board was addressed by the following representatives of Ontario companies which are members of the Canadian Street Ry. Association: J. E. Hutcheson, Ottawa Electric Ry.; G. C. Royce, Toronto Suburban Ry.; J. Anderson, Sandwich, Windsor and Amherstburg Ry.; C. L. Wilson, Toronto and York Radial Ry.; E. F. Seixas, Niagara, St. Catharines and Toronto Ry.; R. J. Fleming, Toronto Ry.; G. E. Waller, Dominion Power and Transmission Co.; and Acton Burrows, Secretary of the Association, who also read a letter from the Manager of the London St. Ry. W. Hodge, Cornwall Railway, Light and Power Co.; M. N. Todd, Galt, Preston and Hespeler Electric Ry., and J. H. Larmonth, Peterborough Radial Ry., also spoke, as well as J. Gibbons, Business Agent of the Toronto Ry. employes, and the Assistant City Solicitor of Toronto. The Chairman of the Board read a letter from the Mayor of Ottawa, stating that the Board of Control of that city was unanimously opposed to the passing of an order as suggested by the Board's Engineer. The Board, which gave a most courteous hearing, reserved its decision.

Projects, Construction and Betterments.

Berlin, Waterloo, Wellesley and Lake Huron Ry.—The Board of Railway Commissioners is being asked to approve of an agreement for the purchase of the lines of the Galt, Preston and Hespeler St. Ry., nine miles, and its leased line, the Preston and Berlin Electric Ry., 10.75 miles, and also to sanction an agreement for the lease of the B., W., W. and L.H. Ry. to the C.P.R., for 99 years from Jan. 1, 1908.

The company is empowered under a Dominion charter to construct an electric railway from Berlin to Wellesley, Stratford, St. Mary's, Clinton and Bayfield on Lake Huron, and in 1904 was given power to enter into agreements with the Galt, Preston and Hespeler Ry., and the Preston and Berlin Ry. By-laws of the town of Berlin, voting $10,000, and of the town of Waterloo, voting $4,000, towards the construction of the line from Berlin to Wellesley, were validated by the Ontario Legislature in 1904. See C.P.R. Betterments, Construction, etc., May, pg. 307. See also Galt, Preston and Hespeler St. Ry., under Electric Railway Finance, etc., on pg. 509.

British Columbia Electric Ry.—A contract has been let to Boyd and Craig, Vancouver, B.C., for the construction of the first section of the company's projected line from New Westminster to Chilliwack. The section proposed to be constructed is from New Westminster to Cloverdale, 12 miles, and the contract covers all work necessary to make the right-of-way ready for tracklaying. The work is to be completed during the current year, and it is expected to have the track laid and the overhead work completed by the end of Feb., 1909. Cloverdale is a station on the New Westminster Southern Ry., owned by the Great Northern Ry., which it is reported is to be abandoned on the completion of a new line, now under construction. It was reported that the B.C. Electric Ry. was negotiating for the purchase of this N.W.S. Ry., with the intention of making

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it an electric line, but we are officially advised that the company has not leased nor purchased the line in question, and has no intention of doing so.

Agreements have been signed between the company and the Vancouver City Council with reference to the construction of new bridges by the city at Westminster Ave. and Granville St. The company is to move its tracks, to keep the lines in repair, to be responsible for any depreciation in all cases except faulty construction by the city, to pay $2,000 a year for running rights over the Westminster Ave. bridge, and $4,000 a year for rights over the Granville St. bridges; no freight cars are to be run over either bridge, but repair cars may be run. (June, pg. 431.)

Cape Breton Electric Co.—The Sydney, N.S., City Council has approved of the construction of a number of extension lines in the city. It is expected that construction upon these extensions will be undertaken at once. (July, 1907, pg. 505.)

Dunnville, Wellandport and Beamsville Electric Ry.—The taxpayers of Dunnville, Ont., have passed a by-law authorizing the subscription for $30,000 of bonds of the company, to assist in its construction. (May, pg. 353.)

Fort Erie Ferry Ry.—The work of construction upon the company's projected railway along the Niagara River from Chippewa to Port Colborne, Ont, according to a recent statement of F. J. Weber, the President, will be commenced during the present year. At the recent session of the Ontario Legislature an act was passed extending the time within which the railway may be constructed.

Galt, Preston and Hespeler Street Ry.—See Berlin, Waterloo, Wellesley and Lake Huron Ry.

Halifax Electric Tramway Co.—A double-track line is being laid on Pleasant St., Halifax, N.S., and some other improvements upon the company's lines are in progress.

Hamilton Radial Electric Ry.—Col. J. M. Gibson, President of the Dominion Power and Transmission Co., Hamilton, which controls this line, said at the opening of the Brantford and Hamilton Ry., that the extension of the company's line from Oakville to Toronto would be the next work to be taken in hand. It was not anticipated that there would be any difficulty in getting to Toronto, but the obtaining of a terminal and approaches there was expected to be a matter of some trouble. The line would have to be taken into the city underground, which would be an expensive and tedious proposition. A central terminal was absolutely necessary, and unless this could be obtained the extension would not be constructed at all. The report that the company was in negotiation for the purchase of a terminal site on Temperance St., Toronto, was without foundation.

The bill authorizing the extension to Toronto has been passed at the current session of the Dominion Parliament, an understanding having been reached upon the question of municipal control. (Jan., pg. 47.)

Hamilton Street Ry.—Conferences have been resumed between the Hamilton, Ont., City Council and the officials of the Street Ry., with respect to the reconstruction of the line. A rough draft of the proposed extensions and improvements was considered June 12, and some exceptions were taken by the company, particularly with reference to the proposal that the company shall pay the entire cost of widening certain streets where the devil strip may be widened. They agreed to nearly all the extensions except the proposal to run a line on Queen St. With reference to widening the streets, it is thought a compromise may be made, by which the city and the company shall each pay half. (Oct., 1907, pg. 759.)

Hamilton, Waterloo and Guelph Ry.—Application is being made at the current session of the Dominion Parliament for an act increasing the company's power to issue bonds to an amount not exceeding $37,500 per mile of line constructed. (Mar., pg. 203.)

Hull Electric Co.—An agreement has been reached with the city council with respect to the double-tracking of the lines in, and the construction of a belt line round, the city. Work has been started on the laying of the second track, and it is expected to have it completed early in July. (June, pg. 431.)

London St. Ry.—Work is being gone on with upon the relaying of the lines in Dundas St., and it is expected that it will be completed early in July. (May, pg. 353.)

Montreal and Southern Counties Ry.—The agreement giving the company an entrance into the city of Montreal was under discussion at a meeting of the city council June 3, and a number of the clauses were approved. (June, pg. 431.)

Montreal Park and Island Ry.—An action in the Montreal courts to secure an injunction to prevent the company constructing a branch line off Sherbrooke St. to Notre Dame de Grace has been dismissed, the court holding that whatever rights the parties taking the action had could have been protected by other means. The franchise had been given by the council, sanctioned by the electors, and approved by the Legislature, while the plans for the line had been approved by the Board of Railway Commissioners. (Mar., pg. 203.)

Niagara, St. Catharines and Toronto Ry.—The Railway Committee of the Senate has inserted certain amendments in the bill of the company further securing the rights of municipalities. (June, pg. 431.)

North Midland Ry.—The route of this projected railway has been surveyed from London, via St. Mary's, to Stratford, Ont., a distance of 35 miles, and a contract for the construction is reported to be let to A. E. Welch, London, Ont. Only two bridges will have to be built on the line. It has not yet been definitely decided when construction will be started, as the details of the financing have not been fully completed. (June, pg. 431.)

Ontario Distributing Co.—Application is being made to the city council of St. Catharines, Ont., by a company with this title for a franchise for an electric line from St. Davids along the Queenston and Grimsby stone road to the point where the Michigan Central Rd. crosses.

Ontario West Shore Electric Ry.—A deed of mortgage dated May 1, given to the Toronto General Trusts Corporation, to secure an issue of bonds amounting to $15,000 per mile of the projected line, has been filed with the Ontario Railway and Municipal Board. At a recent meeting of the Goderich, Ont., Town Council, when the guarantee bonds of the company were signed, plans and profiles of the route between Goderich and Kincardine were produced. J. W. Moyes, C.E., Toronto, stated that it was proposed to begin work from the Goderich and Kincardine ends, and to work north and south from Port Albert. It is claimed that the route will be an easy one, and permit of the hauling of the heaviest trains. At Prince Albert it is proposed to construct a trestle up the river at the steep hill, and to run a short spur into the village. (June, pg. 431.)

Ottawa, Brockville and St. Lawrence Ry.—C. B. Fox, connected with the London, Eng., engineering firm of Sir Douglas Fox and Partners, has returned to England after having inspected the route of this projected railway. The waterpowers along the route were also inspected. These include a 40 ft. fall at Hog's Back, a 30 ft. fall at Manotick, dams of 6, 8 and 12 ft. respectively above Burritt's Rapids, and the rapids at Merrickville. A report will be made of the inspection, and upon this a decision will be reached as to construction. (May, pg. 353.)

Port Arthur Street Ry.—The double-tracking of the line between Current River park and the northern boundary of the city has been authorized by the city council. (Feb., 1907, pg. 113.)

Preston and Berlin Electric Ry.—See Berlin, Waterloo, Wellesley and Lake Huron Ry.

Stratford and St. Joseph Radial Ry.—A meeting of the provisional directors of the company was held at Stratford, Ont., May 26, those present being J. M. Lavoie, J. W. Vincent, and J. P. Prudhomme, of Ottawa; W. Proudfoot, K.C., Goderich, and G. G. McPherson, K.C., Stratford. It is understood that N. M. Cantin, one of the original promoters, is not now interested in the project. It is reported that the three Ottawa directors undertook to personally subscribe $125,000, one-quarter of the authorized capital, and that the remaining three-quarters is being subscribed by New York capitalists. No bonus will be asked from the municipalities along the route of the railway, between Stratford and Lake Huron, but they will be asked to guarantee about one-half of the bond issue, being secured by a mortgage on the line. The only franchise the company proposes to ask from Stratford is an entrance to the city by Erie St. to the Market Square, and along Downie St. to the station. A frequent service between the city hall and the station will be given, and the company will ask to have the privilege of a first offer of a franchise covering the whole city when the time for the provision of such a service arises. (Dec., 1907, pg. 929.)

Toronto Ry.—The work of laying new tracks in different parts of the city is progressing, starting at Bathurst St.; new steel is being laid on Queen St. as far as Dundas St., the south track being laid first, the traffic being carried on along the north track. Certain questions affecting the construction of additional lines were arranged to be argued before the Ontario Railway and Municipal Board June 22. (June, pg. 431.)

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Electric Ry. Finance, Meetings, Etc.

Berlin, Waterloo, Wellesley and Lake Huron Ry.—See Galt, Preston and Hespeler Street Ry., and Preston and Berlin Street Ry.

British Columbia Electric Ry.—Gross earnings for April, $153,725; expenses, $95,352; net earnings, $58,373; other income, $11,036; renewal funds, $10,750; against $117,402 gross earnings; $64,827 expenses; $52,575 net earnings; $9,536 other income; $9,325 renewal funds, for April, 1907. Total earnings for 10 months ended April 30, $1,643,985; total net income, $785,789, against $1,190,315 total earnings; $583,227 total net income for same period 1906-07. A half-yearly dividend on the stock of this company at the rate of 6% has been declared.

Galt, Preston and Hespeler St. Ry.—Application is being made to the Board of Railway Commissioners for a recommendation to the Governor-in-Council, to sanction a conveyance of the railways and appurtenances of the company to the Berlin, Waterloo, Wellesley and Lake Huron Ry., upon terms and conditions mentioned in an agreement dated Jan. 1, 1908.

The G.P. and H.S. Ry. has a length of nine miles, and operates under lease the Preston and Berlin Electric Ry., 10.75 miles. At

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For information about the Canadian Northern Ontario Railway and the country of the Muskokas, Georgian Bay, the French and the Maganetawan rivers and on to the Moose Mountain country, write to C. Price Green, G.P.A., Canadian Northern Building, Toronto.

For the Superior Divide, the magnificent fishing, canoeing and hunting country between Thunder Bay and the Lake of the Woods; and for facts about travel from Winnipeg further west through Manitoba, Saskatchewan and Alberta to Edmonton, write to C. W. Cooper, A.G.P.A., Canadian Northern Railway, Winnipeg.

Then there are the Halifax and South Western and the Inverness Railways opening up breezy Ocean Shore to summerers and travellers. For information about Nova Scotia and Cape Breton, write to P. Mooney, G.P.A., Halifax and South Western Railway, Halifax

June 30, 1907, it was reported to have a total paid-up capital of $31,310, entirely of common stock, and a floating debt of $100,000 bearing interest at 5%. The cost of the line and rolling stock was reported to have been $114,169.14. The leased line was reported to have a paid-up capital of $1,000 and to have cost $423,814.11. No separate reports are given as to the earnings, etc., of the two companies, the figures for the year ended June 30, 1907, as reported to the Dominion Government for the G.P. and H.S. Ry., including those of the P. and B.E. Ry. These showed gross earnings, $107,093.36; expenses, $64,639.97; net earnings, $42,453.39; proportion of earnings to working expenses, 51%; earnings per train mile, 49 cents; operating per train mile, 25.1 cents; freight car mileage, 17,452; passenger car mileage, 199,470; total car mileage, 216,922. Passengers carried, 594,815; freight carried, 84,871 tons. The G.P. and H.S. Ry. is owned by the C.P.R. Co. See also Preston and Berlin Electric Ry.

Halifax Electric Tramway Co.—Receipts for May, $13,147.30 against $13,039.47 for May, 1907. Receipts for 5 months ended May 31, $64,361.15, against $61,765.27 for same period 1907.

London St. Ry.—Gross earnings for April, $17,178.54; operating expenses and taxes, $13,811.58; net earnings, $3,366.96; interest, $2,362.33; surplus, $1,004.63; against, $16,644.81 gross earnings; $13,159.44 operating expenses and taxes; $3,485.37 net earnings; $2,282.96 interest; $1,202.41 surplus, for April, 1907. Gross earnings for May, $18,891.22; operating expenses and taxes, $14,385.32; net earnings, $4,505.90; fixed charges, $2,351.05; surplus, $2,154.85; against $18,570.44 gross earnings; $14,474.35 operating expenses and taxes; $4,096.09 net earnings; $2,312.44 fixed charges; $1,783.65 surplus, for May, 1907. Aggregate gross earnings for 5 months ended May 31, $86,356.90; operating expenses and taxes, $66,928.59; net earnings, $19,428.31; fixed charges, $11,594.82; surplus, $7,833.49; against $85,129.54 aggregate gross earnings; $66,380.39 operating expenses and taxes; $18,749.15 net earnings; $11,146.57 fixed charges; $7,602.58 surplus, for same period 1907

Montreal St. Ry.—Gross earnings for May, $313,678.91; operating expenses, $169,723.59; net earnings, $143,955.32; city percentage on earnings, $26,595.72; interest on bonds and loans, $19,422.34; contingent for renewals, $15,338.43; rent leased lines, $444.43; surplus, $82,154.40; against $295,951.89 gross earnings; $170,495.51 operating expenses; $125,456.38 net earnings; $22,614.22 city percentage on earnings; $12,371.56 interest on bonds and loans; $14,306.94 contingent for renewals; $339.96 rent leased lines, for May, 1907. Total earnings for 8 months ended May 31, $2,341,351.62; operating expenses, $1,485,623.53; net earnings, $855,928.09; standing charges, $385,788.23; surplus, $470,139.86; against $2,169,635.64 total earnings; $1,410,567.55 operating expenses; $759,068.09 net earnings; $333,828.66 standing charges; and $425,239.43 surplus, for same period 1906-07.

An additional issue of $1,000,000 of common stock is being offered to shareholders of record June 30, at $125, and in the proportion of one share of new stock to every nine of old held.

Port Arthur Street Ry.—The question of the value of the portion of the Port Arthur Street Ry. in the city of Fort William, came before the Ontario Railway and Municipal Board, at a sitting at Port Arthur, June 12. The Chairman stated that Fort William was practically expropriating the line and Port Arthur would have to prove to the Commission its worth. On the following day it was agreed that Fort William was to pay for the present value of the line only and not for any estimated profits; the profits for the next five years are to go to Port Arthur after the running expenses and maintenance charges are deducted and 5% paid for the investment Fort William has made in the railway. After hearing all the evidence the Board reserved decision.

Preston and Berlin Electric Ry.—Application is being made to the Board of Railway Commissioners for a recommendation to the Governor-in-Council to sanction a conveyance of the railways and appurtenances of the company to the Berlin, Waterloo, Wellesley and Lake Huron Ry., upon terms and conditions mentioned in an agreement dated Jan. 1, 1908. See also Galt, Preston and Hespeler St. Ry.

St. Thomas Street Ry.—The Manager of the St. Thomas Street Ry. reported the first advance in receipts of the year for the month of May. The cash fares realized $671.88, and the ticket sales $937.75; total, $1,609.73, an increase of $150.98 over May, 1907. The passengers carried numbered 41,449, against 41,081 in May, 1907.

Sydney and Glace Bay Ry.—The press reports that negotiations had been in progress and were practically completed for the sale of the half-interest which the Dominion Coal Co. has in this line, to the Cape Breton Electric Co., owning the other half-interest, are denied.

Toronto Ry.—Car earnings for May, $295,809.06; against $276,070.67 for May, 1907. Total earnings for 5 months ended May 31, $1,371,305.67, against $1,290,656.81 for same period 1907.

Winnipeg Electric Street Ry.—A regular quarterly dividend of 2½%, payable July 2, to shareholders of record June 30, has been declared.

Electric Railway Notes.

The reported resignation of A. N. McLennan, General Manager of the Sydney and Glace Bay Ry., Sydney, N.S., was denied by him June 11.

W. H. Marsh, who died of hydrophobia at Brooklyn, N.Y., recently, was a native of Consecon, Ont., and constructed and for some years operated the street railway at Belleville, Ont.

The Preston Car and Coach Co., Preston, Ont., has recently built four 50 ft. cars for the Southwestern Traction Co., one 40 ft. double truck car for the Berlin and Waterloo St. Ry., and rebuilt one car for the Galt, Preston and Hespeler Electric Ry.

The Vancouver Japanese Amusement Gardens, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $30,000, to carry on amusement and tea gardens, and acquire a lease of certain property to which the B.C.E. Ry. Co is a party.

An order passed by the Board of Railway Commissioners respecting the Montreal Terminal Ry. Freight and Passenger Tariffs, and the dismissal of a complaint respecting the Montreal Park and Island Ry. fares will be found on pg. 475 under the head of Railway Commissioner's Traffic Orders.

The Bella Coola Telephone, Light and Power Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $25,000, with power, among other things, to construct, equip and operate electric, cable or other tramways or street railways for the conveyance of freight and passengers.

The Montreal St. Ry. has placed in operation on its suburban lines two new pay-as-you-enter cars, and will add 10 more as rapidly as possible. The feature of the new cars is that the entrance is in the middle of the car, where there is a wide platform, allowing the passengers to enter either the smoking or non-smoking compartments.

An action has been entered on behalf of the city of Montreal against the Montreal Terminal Ry. for alleged violation of by-law 274, which obliges the company to run its cars from Marie Anne St., to its terminus at Maisonneuve. Since the line was taken over by the Montreal St. Ry. the cars which start at the drill hall are only run as far as the east end of Marie Anne St.

The Standard Construction Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $40,000, and office at Chatham, Ont., to build and equip for any person or company, the whole or any portion of any electric or other railway or tramway. The provisional directors are: W. C. Crawford, Tilbury; J. and W. T. Pigott, W. R. Phillimore, Chatham; J. W. McColl, Toronto

Bermuda Companies, Ltd., has been incorporated under the Dominion Companies Act, with a capital of $100,000 and office at Montreal, to develop or assist in developing the resources of the colony of Bermuda, and in connection therewith to construct, equip and operate tramways and other facilities for developing and fostering tourist traffic. The provisional directors are: A. A. Allan, C. Morgan, C. G. Heward, E. G. T. Penny, Montreal; G. M. Allen, New York.

The Montreal City Council has not finally approved of the proposal to allow the Street Railway Co. to carry freight over its lines. The company will not pay anything extra for the privilege, but there are conditions by which the number of freight cars are limited between certain hours, and restricted at others. In the hours during which freight cars may be run at the discretion of the company, it is provided that the operation of the passenger traffic is in no way to be interfered with. The main difficulty in the way of arriving at a decision is that the city desires that the company shall remove at its own cost the snow from the streets in winter and sprinkle the streets in summer. The company ask that the city pay one-half the cost of the removal of the snow.

The Montreal Gazette of June 19 says: "Suit has been commenced in the Essex county court at Windsor, Ont., by A. J. Nelles, to set aside the election of J. and W. T. Pigott, W. C. McKeough and W. R. Phillimore, as directors of the Windsor, Essex and Lake Shore Electric Ry. Orders are also asked to compel the defendants to pay into the company's treasury certain sums claimed by the plaintiffs to be due the company on a contract and to restrain A. F. Pigott from paying out any more money to defendants. Pigott is also named as one of the defendants. The trouble is over a contract which the defendants are alleged to have made with the Keystone Construction Co. for the building of the road, and that was later taken over by the interests of the road, not for the best." The name of W. C. McKeough does not appear in the list of directors of the Windsor, Essex and Lake Shore Rapid Ry., elected at a special meeting of shareholders, Mar. 4.

St. John, N.B., Ry. Report.

Following are extracts from the report for the year ended April 30, presented at the annual meeting June 10. The year's business showed a net profit, after providing for the interest on bonds and all other charges, of $51,879.58, from which two half-yearly dividends of 3%, amounting to $48,000, were paid, leaving $3,879.58, which has been transferred to profit and loss account. The gross earnings show a satisfactory increase, and the net earnings remain about the same as in 1906-07. Additional expense has been incurred in operating the St. John West service, which is not a remunerative one, but it is anticipated that with the construction of the new bridge over the Falls, it may be made a paying one. The road-bed, rolling stock, power station, and equipment have all been maintained and kept up to a high standard of efficiency. During the year all the street railway lines in St. John West have been completed, including the building of a trestle down Rodney wharf to the ferry, a trestle on Union St., and the filling in of the embankment near the Pond. Additional power feeders from the power house to Union St. have been constructed, the Union St. car barn has been completed, and the outside wires, poles, etc., in St. John West have all been renewed. Six open and four closed cars with all equipment have been added to rolling stock. The lines in Paradise Row, Haymarket Square, and Union St., have been double-tracked, and a single track round King Square, connecting with King St., has been constructed. Other improvements in connection with the company's gas and electric lighting and power plants have been made.

Bonds to the amount of $300,000 in denominations of $100, $500 and $1,000, payable in 20 years from May 1, had been authorized to become a charge on the real and personal property, after the bonds now outstanding.

ASSETS.

Cost of property	$1,866,891.45
Accounts receivable	33,007.00
Stores	29,529.78
Cash on hand	1,000.00
Cash in bank	14,196.03
	$1,944,624.26

LIABILITIES.

Capital stock	$800,000.00
Bonds	750,600.00
Accounts payable	34,858.16
Notes payable	180,000.00
Dividends payable June 10	24,000.00
Outstanding tickets	1,544.54
Contingent and depreciation	52,221.67
Profit and loss	101,399.89
	$1,944,624.26

INCOME ACCOUNT.

Profits for the year after providing for interest on bonds and all other charges		$51,879.58
Dividends paid	$48,000.00	
Transferred to profit and loss	3,879.58	$51,879.58

The officers and directors for the current year are: President, Jas. Ross, Vice-President, H. H. McLean; other directors, R. B. Emerson, J. Manchester, J. J. Tucker, W. Downie, H. B. Robinson, and F. E. Sayre; Secretary-Treasurer, H. M. Hopper.

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Break in the Cornwall Canal.

The Ottawa and New York Railway swing bridge across the Cornwall canal, near lock 18, collapsed June 23. The accident was caused by the undermining of the centre pier of the bridge, by the rush of water and masonry from a large break in the canal bank. This bridge, with the accompanying one over the St. Lawrence, was opened for traffic in 1900, and was about 286 ft. long. The pier on which the bridge swung was situated against the south bank of the canal and rose about 30 ft. above the canal level. The O. and N.Y. Ry. officials had nothing to say regarding the wreck, beyond the fact that the bridge would be rebuilt as speedily as possible. The break in the canal bank is causing considerable inconvenience to the shipping trade, but a press report recently stated that a special rate is being granted by the railway companies for grain at that time at Kingston, while arrangements would be made for dealing with grain in transit, which had not arrived at Kingston, by transportation by the lake and rail route via Georgian Bay ports. The work of repairing the canal bank is well in hand, in charge of J. L. Weller, Superintendent of the Welland Canal, and it is understood that a temporary cut is being made on the north side, to allow of the passage of vessels, which will probably be finished about the middle of July.

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TORONTO — CANADA

Montreal St. Ry. Mutual Benefit Assoc'n.

The fifth annual report records the relief work done for the year ended April 30 as compared with the previous year, as follows:

	1907-1908	1906-1907
Members disabled through sickness or injury.........	546	728
Amounts paid for same......	$7,321.30	$9,737.00
" " medicine...	1,707.78	1,804.73
" " pensions...	161.00	30.50
" " insurance..	4,791.68	6,016.69

Less sickness was reported during the year than in 1906-07, and the death of 12 members occurred. The amount invested in securities, held by the Royal Trust Co., is $37,122.50; for which interest of $1,967.50 has been received. An amendment to the association's charter has been made, allowing the Montreal Terminal Ry.'s permanent employes to become eligible for membership. The Montreal St. Ry. Co. made a special Christmas donation to the funds of $3,000, bringing up the company's total contributions for the year to $14,463.90. Added to this, the dues received from members, $11,502.50; proceeds of picnic, interest on investments and bank deposits, $11,369.23, the total revenue for the year was $37,335.63; expenditure, $21,767.91; leaving a surplus of $15,567.72. The M.S.R. Co. pays one-half of the fees and one-third of the dues payable by members, and the whole expenses of management, amounts representing which are included in the amount mentioned as the company's contribution, and which are entirely separate from the amounts quoted as subscribed by members.

At the annual meeting June 18, the following were elected as the committee of management for the current year: President, W. G. Ross; D McDonald, A. Gaboury, A. S. Byrd, R. M. Hannaford, D. E. Blair, H. G. Taylor, J. Rafferty, A. Leger, E. Doherty, F. Lamoureux, J. W. Butler, E. Ennis and J. Hughes; Secretary-Treasurer, P. Dubee.

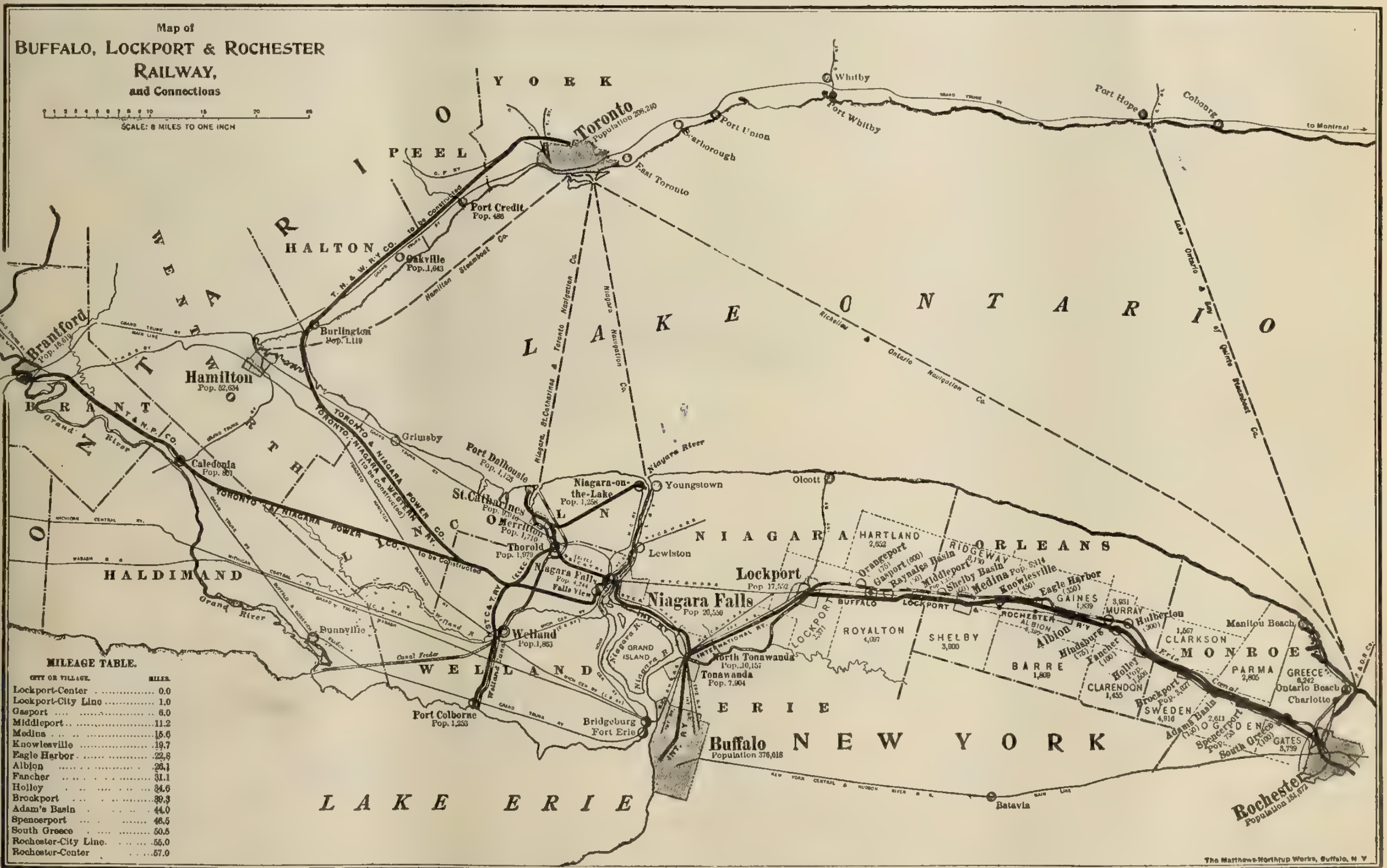
Niagara, St. Catharines and Toronto Ry.

The N., St. C. and T. Ry. has taken a place among the various Canadian Northern Ry. interests, or at least recent changes in the directorate indicate that in future it will be closely allied to the various enterprises which are controlled and administered from 1 Toronto St., Toronto. After the last annual meeting, as reported in our April issue, the board was constituted as follows: President, F. Nicholls; Vice-President, E. R. Wood; Secretary, Æ. Jarvis; Assistant Secretary, C. E. A. Goldman; other directors: D. D. Mann, Z. A Lash, H. G Nicholls.

As announced in our last issue D. D. Mann retired from the board in May and was succeeded by D. B. Hanna, Third Vice-President of the Canadian Northern Ry., who was also elected Vice-President of the N., St. C. and T.R. Co. Early in June Mr. Hanna was elected President, succeeding F. Nicholls, who resigned. J. D. Morton, Chief Accountant of the Canadian Northern Ry., succeeded C. E. A. Goldman as a director, and was elected Vice-President, succeeding E. R. Wood, resigned, and A. J. Mitchell, Comptroller of Mackenzie, Mann & Co., Ltd., was appointed Secretary, Æ. Jarvis resigning that position and C. E. A. Goldman resigning the Assistant Secretaryship.

The St. Catharines and Niagara Central Ry. was originally incorporated by the Ontario Legislature in 1881, and by chap. 60 of the Dominion acts of 1887 was declared to be for the general advantage of Canada. A subsidy of $3,200 a mile for 12 miles of line was voted by the Dominion Parliament in 1887, from St. Catharines to the bridge over Niagara River; in 1889 a subsidy of a similar amount per mile was voted in respect of the projected construction of 20 miles of line from St. Catharines towards Hamilton, and in 1890 a subsidy for a further distance of 14 miles, completing the distance to Hamilton, was voted, the two latter being revoted in 1894. The first subsidy was earned and paid, but no further payments on subsidy account have been paid. A loan of $40,000 was made to the company by the Ontario Legislature, and the municipalities through which the line passes subscribed $100,000 to shares and bonds. The line was constructed from St. Catharines to Niagara Falls, 12.3 miles, and was opened for traffic Dec. 20, 1888. It was operated with varying success, and in 1895 its name was changed by Dominion statute to the Niagara, Hamilton and Pacific Ry.; various other acts having been passed by the Dominion Parliament and the Ontario Legislature, extending the time for the completion of the projected lines, and otherwise amending its powers. The company ultimately passed into the hands of a receiver, and was sold for $100,000 to the Niagara, St. Catharines and Toronto Ry. Co., which took possession April 15, 1899.

The N., St. C. and T. Ry. Co. was incorporated under an act passed by the Dominion Parliament in 1899, section 8 of which provided for the acquisition of the St. Catharines and Niagara Central Ry. The organization of the company was completed under this charter Sept. 1, 1899, and the acquired line was extended at the Niagara Falls end from the Michigan Central Rd. junction to the foot of Bridge St., one mile, and at the St. Catharines end to Port Dalhousie, 4.8 miles, making the total length of the line 18.1 miles. The entire roadbed was rebuilt, and the overhead equipment for the operation of the line by electricity installed, an arrangement for power being made with the Canadian-Niagara Power Co. The company use steam for the operation of a freight service, and has an electric locomotive for shunting purposes, the passenger service being operated entirely by electricity. The officers of the company as then constituted were: President, J. A. Powers, Lansingburg, N. Y.; Vice-President, J. W. Herbert,



MILEAGE TABLE.

CITY OR VILLAGE.	MILES.
Lockport-Center	0.0
Lockport-City Line	1.0
Gasport	6.0
Middleport	11.2
Medina	15.6
Knowlesville	19.7
Eagle Harbor	22.8
Albion	26.1
Fancher	31.1
Holley	34.6
Brockport	39.3
Adam's Basin	44.0
Spencerport	46.5
South Greece	50.5
Rochester-City Line	55.0
Rochester-Center	57.0

New York City; Secretary-Treasurer, A. B. Colvin, Glen's Falls, N.Y.; General Manager, E. F. Seixas, St. Catharines, Ont.; General Passenger Agent, G. M. Neelon, St. Catharines, Ont.; General Freight Agent, W. N. Warburton, St. Catharines.

In 1901 the Dominion Parliament passed an act authorizing the company to acquire by agreement of lease or purchase, the Niagara Falls, Wesley Park and Clifton Tramway Co.; the Port Dalhousie, St. Catharines and Thorold Electric Ry., and the Hamilton, Grimsby and Beamsville Electric Ry.; in 1905 the Dominion Parliament passed an act having reference to a right-of-way over Burlington Beach; and in 1906 and at the current session of the Dominion Parliament the company's powers in regard to construction were amended, and an extension of time given for the construction of the lines authorized. Under the act of 1901 the company acquired the Niagara Falls, Wesley Park and Clifton Tramway for $100,000, and the Port Dalhousie, St. Catharines and Thorold Electric Ry. for $90,000.

Under one of its other amending acts the company constructed a line from Thorold to Fonthill, 7.00 miles, in 1907, and on May 4 of the current year opened an extension of this line to Welland, a further distance of 4.00 miles. The company is empowered under its various acts to construct the following additional lines: St. Catharines to Toronto, via Burlington Beach or Hamilton; from St. Catharines to Niagara-on-the-Lake; from Niagara Falls to Fort Erie; from Fort Erie to Port Colborne; from Welland to Port Colborne, and from Welland to Brantford. Plans have been filed and approved for all of these lines except those from St. Catharines to Toronto, and from Fort Erie to Port Colborne. In Jan., 1905, the control of the company passed into the hands of a Toronto syndicate, in which it is said Mackenzie, Mann & Co. held a two-fifths interest, E. R. Wood one-fifth, and F. Nicholls and associates two-fifths.

The routes at present being operated by the company's cars are: From Niagara Falls, Ont., through Stamford, Thorold, Merritton, and St. Catharines to Port Dalhousie, a distance of about 16 miles, and connecting with the company's steamers Lakeside and Garden City for Toronto; a branch from Thorold running through Fonthill to Welland, a distance of 11 miles; a local line through St. Catharines, Merritton, and Thorold, about six miles; and a local line at Niagara Falls, Ont., starting from Bridge St., and running through the city of Niagara Falls, Niagara Falls Centre, Drummondville, and Lundy's Lane to Falls View, and thence to the right-of-way of the Toronto and Niagara Power Co. near Montrose Junction, a distance of six miles. The main line from Port Dalhousie to Niagara Falls is laid throughout with 80-lb. steel rails, and has track connections with the G.T.R., the Michigan Central Rd., and the Wabash Rd., for the interchange of freight. Standard freight cars are handled in trains by a 40-ton electric locomotive, and express matter is handled on the line by the Dominion Ex. Co.

The financial statement of the company for 1907 was given on pg. 281 of our April issue, and some additional historical and other information connected with the constituent companies appears on pgs. 117 and 119 of our issue of April, 1901, and in the statement of F. Nicholls, President, at the annual meeting of shareholders, given on page 213 of our issue of April, 1906, and under the tabular statement Electric Railway Statistics for year ended June 30, 1907, given on page 125 and 127 of our Feb. issue.

The Niagara Falls, Wesley Park and Clifton Tramway Co. was incorporated under the

THE N. L. PIPER RAILWAY SUPPLY CO.
LIMITED
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Colored and White all Grades. In Bales of 50 lbs., 125 lbs., 250 lbs., 500 lbs.
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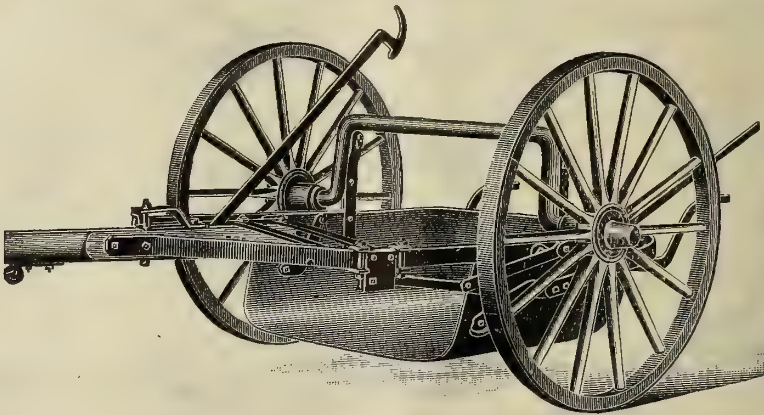
TORONTO, CANADA LIMITED



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PLOUGHS DUMP CARS
DUMP WAGONS DUMP CARTS
WHEELBARROWS TRUCKS
CEMENT MIXERS WAGONS
etc., etc.
PROMPT SHIPMENTS SEND FOR CATALOGUE

Ontario Statutes, and in 1901 the Ontario Legislature passed an act authorizing the sale of the line to the N., St. C. and T. Ry. Co.

The Port Dalhousie, St. Catharines and Thorold Electric Street Ry. Co. was incorporated under the Ontario Statutes by letters patent June 28, 1893, and by chap. 93 of the Ontario Statutes of 1902, it was empowered to lease or sell its undertaking to the N., St. C. and T. Ry. It is provided by the act that the sale or lease of the line is "subject to the rights, position or power of any municipal corporation under any statute, by-law, agreement or otherwise, and the same may be enforced against the N., St. C. and T. Ry. in the same manner, and to the same extent, and as fully as the same could be enforced against the P.D., St. C. and T. Ry. Co." The railway is under the jurisdiction of the Ontario Railway and Municipal Board. The line was purchased by the N., St. C. and T. Ry. Co. in 1901, from Dawson and Symonds, for $90,000.

The N., St. C. and T. Ry. also controls the Niagara, St. Catharines and Toronto Navigation Co., which operates the Lakeside and the Garden City between Port Dalhousie and Toronto. A company with the title of the Niagara and St. Catharines Rd. and Steamboat Co. was incorporated by chap. 73 of the Ontario Statutes of 1877, and there was an amending act, chap. 88, passed in the same year. The index to railway legislation issued by the Ontario Railway and Municipal Board adds to these dates the note, "May be controlled by the N., St. C. and T. Ry. Co." Prior to the season of navigation of 1901 the steamship traffic between Toronto and Port Dalhousie was carried on by the Garden City, owned by T. Nihan, St. Catharines; the Lakeside, owned by the Lakeside Navigation Co., and the Lincoln, owned by W. G. Thurston, and — Hamlin, who were largely interested in the Lakeside Navigation Co. The Garden City was purchased from Mr. Nihan, and the Lakeside Navigation Co.'s franchise, together with the steamer owned, were purchased by J. W. Flavelle, Z. A. Lash, K.C., and J. H. Plummer, of Toronto, who were associated with the New York interests then owning the N., St. C. and T. Navigation Co., was formed to operate the steamships in connection with the railway.

The change in the N., St. C. and T. Ry., and the recent acquirement by Wm. Mackenzie of the control of the Electrical Development Co. of Ontario, will doubtless bring under the same control, not only a large power development at Niagara Falls, but an extensive system of electric railway development. The Toronto and Niagara Power Co. has already constructed a power distribution line from Niagara Falls to Toronto, along its own right-of-way, 80 ft. wide, and has power to construct an electric railway along the same. A company, with the title of the Toronto and Hamilton Ry., was formed to construct the railway, and at a later date power was taken to construct a line from a point on the Toronto-Niagara Falls line to Brantford, when the title of the company was changed to the Toronto, Niagara and Western Ry. Surveys for both these lines have been made, and the plans have been approved by the Board of Railway Commissioners. The accompanying map not only shows these lines, and some of the lines constructed and projected of the N., St. C. and T. Ry., but also shows a connection through the International Ry. with a United States line—the Buffalo, Lockport and Rochester Ry.—in the promotion of which some of the interests originally controlling the Electrical Development Co. of Ontario were concerned. It is said that 18 thirtieths of the stock, etc., are held by Canadians, and 12 thirtieths in the U.S. The line is constructed on a private right-of-way near to or adjoining the Rochester-Niagara Falls division of the New York Central Rd. and includes 54 miles of single track, with 4.4 miles of side track. The roadbed and bridges have been constructed so as to permit of the laying of a second track. For the operation of the line an agreement has been made with the International Ry., for full transfer rights at Lockport, N.Y., for Buffalo, Tonawanda, North Tonawanda and Niagara Falls. The original promoters of this railway also secured charter rights in Canada and New York for the construction of a bridge across the Niagara River below the falls, with power to operate an electric railway thereon and to connect with existing lines or lines to be constructed on either side of the river. D. B. Hanna, President N., St. C. and T. Ry., recently went over the line of the Buffalo, Lockport and Rochester Ry., and some negotiations are said to have been taking place recently between H. J. Pierce, President of the International Ry., and F. Nicholls, Toronto, who was one of the incorporators of the Bridge Company, in connection, it is said, with proposals for the construction of the bridge. The construction work on the B.L. and R. Ry. was carried out by the J. G. White Co., Ltd., J. D. Evans being local construction Superintendent; E. Wragge, C.E., Toronto, representing the financing company. J. M. Campbell, Kingston, Ont., has been elected President of the company, succeeding C. B. Hill, Buffalo, N.Y., and it is said he will also have charge of the operation of the line.

The present officials of the N., St. C. & T. Ry. are: General Manager and Purchasing Agent, E. F. Seixas; Freight and Passenger Agent, J. Paul; Superintendent, W. Robertson; Auditor, D. J. McIntosh; Master Mechanic, W. Pay; Roadmaster, J. Carey.

Ottawa Electric Railway Wages, etc.

Some little time ago a deputation from the Ottawa Electric Ry.'s motormen and conductors waited on Superintendent Hutcheson and asked for an increase of wages, a change in the hours, and also a change in the system of providing uniforms. The question of the recognition of their union also came up, which the Superintendent absolutely refused to consider. He also took the ground that the time was not opportune for an increase in wages, as the men were receiving from 17½ to 21½c. an hour, with free clothing after five years' service. The deputation afterwards interviewed the President, Mr. Ahearn, who took the same ground as Mr. Hutcheson. A board of conciliation was then appointed, which while acting in the capacity of judges came to the conclusion that the men were not entitled to any higher rate of wages than they were receiving, but as conciliators they asked that for the sake of peace and harmony the company make some concession, and the Chairman, Prof. Shortt, suggested 1c. an hour, which the company agreed to. The following schedule was therefore put into effect June 1:

"Wages—1st year's service, 18½c. an hour for week days; 20½c. an hour for Sundays. 2nd year's service, 19½c. an hour for week days; 21½c. an hour for Sundays. 3rd year's service, 20½c. an hour for week days; 22½c. an hour for Sundays.

"The hours of labor for regular men will be as at present, 10 hours constituting a day's work, or as near 10 hours as the schedule of runs will permit. The company will not call on any conductor or motorman to perform extra work in excess of his regular schedule day's work of 10 hours except in cases of necessity. Men will not be expected to work beyond the full day unless they are agreeable to do so.

"Clothing of conductors and motormen will consist as follows: For summer, full suit, coat, vest, and trousers; for winter, trousers every year, overcoat every second year. All conductors and motormen must be so provided. The company will pay full cost of such clothing for all men in the service over one year; and half the cost of those in their first year. Uniform caps and badges will be supplied by the company without charge.

"As heretofore, the company will, except in cases of personal dishonesty, meet and treat with individual employes or a committee of the employes on grievances or disputes which may arise from time to time between the company and its employes."

Grain Elevator Notes.

The Hitchcock Farmers' Elevator, Trading and Supply Co., Ltd., Regina, Sask., has been dissolved.

The Royal Elevator Co., Ltd., has been registered in Saskatchewan under the Northwest Territories Ordinance respecting foreign corporations.

Press reports state that the C.P.R. is considering the advisability of erecting elevators at various points on the Pacific coast, but has not yet decided to take any action this year.

The men working on the erection of the Grand Trunk Ry. elevator at Midland, Ont., which is being built by the John S. Metcalf Co., Chicago, struck work June 17 for an increase of wages.

Regarding the reports to the effect that the C.P.R. has decided to erect elevators along the Pacific coast, we are officially advised that no decision has been made in the matter, and it is not considered likely that such a project will be taken up for some time.

The Dominion Government elevator at Port Colborne, Ont., it is announced, will be completed during July. Steps are being taken to urge on the Minister of Railways the necessity of a railway connection, so that the elevator may be accessible at other times than during the navigation season.

The question of the use of the Intercolonial Ry. grain elevator at Halifax, N.S., for local purposes, was discussed at Ottawa, recently, by a deputation. The Railway Department officials expressed the opinion that if the elevator could be made of service to the mercantile community of Halifax, and if sufficient could be got out of it to pay the cost of operation, it would be placed at their disposal.

Press reports recently stated that the G.T. Pacific Ry. had awarded a contract to the John S. Metcalf Co., Chicago, Ill., for the construction of an elevator of 2,000,000 bush. capacity, at Fort William, Ont.; that the contract price was $3,000,000, and that completion was to be accomplished in 1909. Another press report stated that the G.T. Pacific Ry. would commence, this year, the construction of six 10,000,000 bush. elevators along the Kaministikwia River at Fort William. We have been unable to obtain any official information in regard to these matters, further than a statement that the reports referred to are incorrect. We understand that the company has very complete plans for the development of its lake terminals at Fort William, and that one of the units in its elevator construction calls for a 10,000,000 bush. elevator.

A Dominion Government bill to amend the Inspection and Sale Act, as regards grain, has been given a second reading in the Senate. It is proposed to repeal par. 6, sec. 52, chap. 85, of the Revised Statutes, and to substitute the following: "The Manitoba Inspection Division, which consists of (1) the provinces of Manitoba, Saskatchewan, Alberta and British Columbia; (2) the Northwest Territories; (3) that portion of the Province of Ontario lying west of and including the existing district of Port Arthur." A new section is substituted for 123, providing for the inspection of all grain produced west of Winnipeg, and passing through that city to eastern points at Winnipeg, or a point within the district, such inspection to be final as between the western farmer or dealer and the Winnipeg dealer; any grain inspected at Winnipeg may be reinspected at Fort William or other terminal elevator; if any car on its arrival at a terminal elevator is found by the inspector to be plugged or wrongfully loaded, the grain in such car shall be reinspected, and if the first inspection is altered the original certificate shall be recalled, and a new one issued; railway companies and other transportation companies shall notify the inspection department of the arrival of cars of grain at points where inspection is authorized, and of the position of such cars in the railway yard, and shall not move the same until the sampling has been completed. A new section, 126a, is proposed to be added, providing that all grain stored according to the preceding sections shall be binned under the direction, supervision and control of the inspection officials, who shall have "full control of all grain in terminal elevators, and no grain shall be shipped out of, transferred or removed from any terminal elevator without his supervision"; the inspection officials shall keep records of grain received or shipped from terminal elevators; no grain shall be transferred from one bin to another at a terminal elevator without the supervision of the proper inspecting officer, who is to make a record of the transfer; no grain shall be specially binned for any person, firm or corporation in any terminal elevator, except where it is found to be out of condition upon arrival, or as provided in sections 34 to 38 of the Manitoba Grain Act; all grain marked for cleaning shall be cleaned under the supervision of the inspection officials, who shall have power to condemn any machine not doing satisfactory work, or to order the installation of additional machinery if the facilities provided are insufficient. Another new section, 126b, provides for the making by the Chief Inspector, subject to the approval of the Minister of Commerce, of such rules and regulations as are necessary for the control of the binning and cleaning of all grain stored in terminal elevators, including the transferring of grain from one bin to another and the delivery of grain from the bins into cars, vessels or other receptacles. A new sub-section is added to sec. 128, providing that the Chief Inspector shall issue such rules and regulations governing the inspection and outward shipments of grain from Fort William as will satisfactorily identify the inspection certificates with the lake bill or the railway shipping bill, and the lot or parcel of grain covered by such certificate. These various amendments were suggested for adoption by the Royal Commission on the Grain Trade, appointed in 1906, which reported to Parliament under date Oct. 11, 1907.

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Seven charges of selling liquor to Italian laborers on the Transcontinental Railway construction were preferred at Perth, N.B, against B. Therialt, and the Police Commissioner inflicted a fine of $50, or three months' imprisonment, in each case.

An Ottawa press despatch of June 21 states that the C.P.R. mail subsidy contract for the service between Liverpool, Eng., and Hong Kong, via Canada, which has been arranged on a new basis, will be signed shortly. The amount paid under the expired contract is given as £70,000 a year, of which Great Britain paid £60,000 and Canada £10,000. Under the new contract the total amount is reduced to £45,000 annually, of which Great Britain will pay £20,000 and Canada £25,000.

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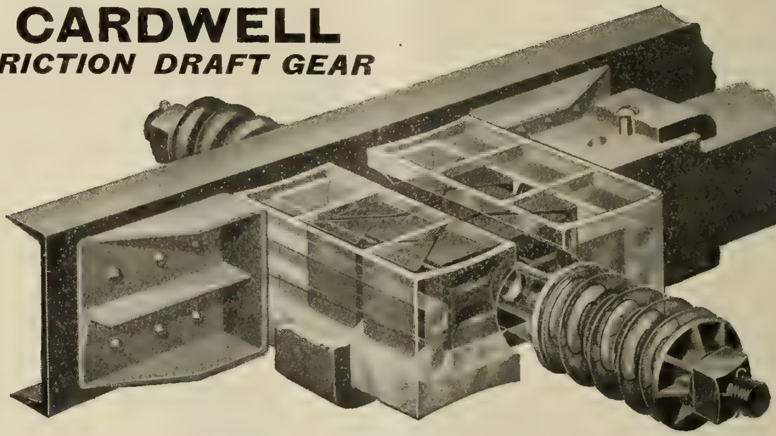

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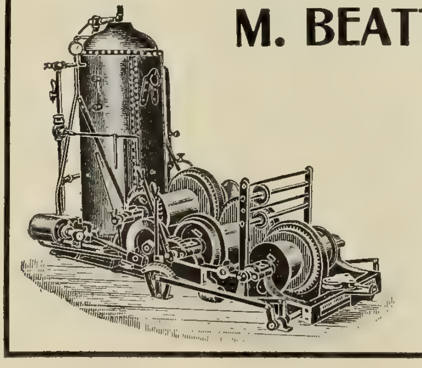

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Hoisting Engines, Centrifugal Pumps for Water and Sand, Stone Derricks, Clam-Shell Buckets, Steel Skips, Coal and Concrete Tubs and other Contractors' Machinery.

MARINE DEPARTMENT.

Duty on Vessel Repairs, etc.

The Minister of Customs has given notice in the House of Commons of the following amendment to the Customs Act: "The equipments, or any part thereof, including boats, purchased or supplied in a foreign country for, or the expenses of repairs made in a foreign country upon, a vessel intended to be employed or which is thereafter employed in the coasting trade of Canada, shall, on the arrival of such vessel in any port of Canada, if arriving within one year after such repairs have been made, or equipment purchased, be liable to payment of duty on the cost thereof at the rate of 25 per cent. ad valorem on the expense of the repairs and on the equipment at the same rate of duty, as if the articles were imported into Canada in the ordinary course."

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Pacific Coasting Law.

An Ottawa dispatch to the Toronto Globe says: "United States vessels will hereafter be excluded from the coasting trade of Canada on the Pacific. For some years the coasting laws of Canada have been suspended, as far as the Pacific coast is concerned, owing to the fact that there was not enough Canadian and British tonnage to fill the trade requirements. Hereafter United States boats will be able to touch at only one Canadian port on a voyage, and clearing from one Canadian port to another will not be allowed. A change is being made in the customs regulations which will curtail a privilege the U.S. transportation companies have enjoyed on the Pacific. After Aug. 1 Canadian goods cannot be carried in bond from a United States port on the Pacific to a Canadian port unless the water carriage is by a Canadian or British registered vessel. This is the same regulation which is in force on the Atlantic coast."

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Atlantic and Pacific Ocean Marine.

The depth of water in Montreal harbor at June 1 was recorded as 36 ft. 7 ins. in the 27½ ft. channel, and 39 ft. 9 ins. in the 30 ft. channel.

Mrs. R. A. Alley, who assumed control of the Alley Steamship Line on her husband's death, was in Ottawa recently en route for Great Britain.

Allan Cameron, General Traffic Agent, C.P.R., for Europe, gave evidence before the Royal Commission on Shipping Rings, at London, Eng., recently.

A fire occurred on the C.P.R. s.s. Montrose, while a cargo of sulphur was being unloaded at Quebec recently, but it was extinguished with comparatively little damage having been done.

The Cunard Steamship Co. recently placed on the market £800,000 of 4½% mortgage debenture stock, redeemable between 1911 and 1920 at 102. The stock was issued at 97 and was fully subscribed.

The Furness-Withy Co.'s s.s. Evangeline, en route from Halifax, N.S., to Liverpool, Eng., collided with an iceberg, the damage sustained necessitating her withdrawal from service until repairs can be accomplished.

The Governor-General, accompanied by the Commissioners, Chief Engineer, and Secretary, made an informal inspection of Montreal harbor recently, particular attention being paid to the recent improvements there.

The Dominion Line s.s. Ottawa, which was recently damaged in collision with the Black Diamond s.s. Trold, had her repairs completed and left the Levis dry dock, June 11, for Montreal, to resume her place on the Atlantic route.

The C.P.R. has, it is reported, decided to establish a boarding-house at its trans-Atlantic terminus at Liverpool, Eng., in order to take care of the Scandinavian emigrants, who frequently have to wait there for a day or two for the sailing of the steamships.

J. F. Welch, second officer of the s.s. Bermudian, has been presented with a silver medal, and five of the crew with bronze medals, by Lloyds Committee, for bravery in assisting in the rescue of the crew of the schooner Mary L. Newhall in February.

W. Bartling, a superintendent of the Norddeutscher-Lloyd Steamship Co., visited Halifax recently, to investigate the facilities there for the handling of passengers and cargo. It is anticipated that, in the near future, the company will put on a service with Canada.

The British Board of Trade, on behalf of the Canadian Government, has presented a silver cup to J. O. Band, captain; a gold medal to J. Smith, chief officer; and £2 each to four seamen, of the British s.s. Cairnisla, in recognition of the rescue of the crew of the St. John, N.B., barque Mary A. Troop, abandoned in the North Atlantic, Feb. 27, 1904.

A press report states that an additional steamship line is to be established between B.C. ports and the Mexican coast, next spring. Capt. Jebsen, of Jebsen and Ostrander, Hamburg, visited Victoria and other ports recently, and is stated to have secured two vessels in preparation for the inauguration of the service. He will leave shortly for a visit to Mexican ports, in the same connection.

During May, 127 ocean-going vessels, having a tonnage of 336,057, entered the port of Montreal, against 107 vessels, having a tonnage of 283,362, in May, 1907. The port revenues for the period from the opening of navigation to May 30, in each year, were:

	1907	1908
Imports	$26,500.00	$26,000.00
Exports	500.00	6,000.00
Local traffic	6,246.59	3,219.51
	$33,246.59	$35,219.51

The C.P.R. s.s. Mount Temple, which was wrecked on Ironbound Island and subsequently floated, was taken to Newport, News, U.S., in charge of the tug Covington, recently. It is understood that the Halifax Salvage Co. was to receive $12,500 in the event of the salvage operations being unsuccessful, and 40% of the appraised value if the vessel was successfully floated. The value of the vessel was settled at £50,000, so that the Salvage Co. is entitled to £20,000 for its work.

The Premier, in reply to a question in the House of Commons, June 10, regarding the "all-red" route, said it was not the intention of the Government either to oppose or suggest any port in connection with the proposed line. That was a question which should be decided for purely business reasons, and which should be left altogether to the company which might undertake the service. The only condition to be considered by the Government was that the service must be between the United Kingdom and Canada.

The s.s. Cairnona, which replaces the wrecked s.s. Kildona, is the latest addition to the Thomson Steamship Line's fleet, running between Canada and Great Britain. She was built at Wallsend-on-Tyne, Eng., her dimensions being: Length, 460 ft.; breadth, 52 ft.; depth of hold, 34 ft. She is fully equipped with the most improved machinery for the expeditious handling of cargo, there being 26 derricks and 11 winches, so arranged that loading or discharging may be undertaken from both sides at the same time. She has a deadweight capacity of 9,000 tons, and has a complete cold storage installation. There is also a limited accommodation for first-class passengers. The Cairnona arrived at Montreal, June 7, on her maiden trip.

Maritime Provinces and Newfoundland.

D. McDonald, a well-known maritime captain, died at Halifax, N.S., June 1, aged 55 years.

The Steamship Senlac Co., Ltd., has been granted supplementary letters patent, reducing its capital stock from $80,000 to $58,100.

The Newfoundland s.s. Stella Maris, having been overhauled during the winter, was placed on the route between Wesleyville and Fogo in June.

The Newfoundland schooner Julia Forsey, from Sydney, N.S., bound for Fortune Bay with coal, ran ashore at Cranberry Head, June 1, and became a total loss.

The Black Diamond Line s.s. Trold, which was recently in collision with the Dominion Line s.s. Ottawa, has been taken to New York, where repairs will be undertaken.

The Public Works Department has arranged for dredging the entrance to Maquapit Lake for 2 miles, and work has been commenced with the dredge Saugus.

The Department of Marine is considering tenders for supplying machinery required for fog alarm purposes, during a period of one or three years, at the option of the Department.

The name of the steamboat Mascott, official number 92,415, registered at Chatham, N.B., has been changed to Imperator by an order of the Governor-General-in-Council.

The Hampstead Steamship Co.'s s.s. Hampstead, which recently ran ashore and sank near Gagetown, and was subsequently raised, was taken to St. John, N.B., June 3, where she was repaired.

The Dominion Atlantic Ry. Co.'s s.s. Boston collided with the Boston schooner Fame recently, in the Bay of Fundy, during foggy weather. The Fame immediately sank, and only two of a crew of 20 were saved.

The Louisburg, N.S., steamboat Sea Bird broke down early in June, and has been towed into port for repairs. The owners receive a Government subsidy for the provision of a passenger and freight service between Louisburg and Gabarus.

The steam tug G. D. Hunter collided with a scow at Indiantown, N.B., June 17, tearing a large hole in her side, causing her to sink immediately. The tug was owned by Ruddock Bros., St. John, and the loss is estimated at $8,000, covered by insurance.

The Lunenburg, N.S., schooner Crofton McLeod ran ashore on the west side of Net Ledge, in Lunenburg harbor recently, and became a total loss. She was built at Mahone Bay, N.S., in 1901, her dimensions being: Length, 83 ft.; breadth, 24.1 ft.; depth, 9.5 ft.; 85 tons register.

The Plant Line s.s. A. W. Perry, which recently ran ashore in the Strait of Canso, and was subsequently floated, was taken to Port Hastings, N.S., where temporary repairs were undertaken, after which she was towed to Halifax, where she was docked and a thorough overhauling accomplished.

The Newfoundland s.s. Virginia Lake has had eight first-class berths and 42 steerage berths, and 12 hospital berths and other accommodations added during a recent overhauling, prior to being placed on the Labrador route in June. Capt. Parsons is in command, with D. Howe as chief engineer.

The salvage operations on the wrecked s.s. Tolesby, off the Newfoundland coast, have been completed. Of the total cargo of 11,000 bales of cotton, 3,150 bales have been salved, valued at about $100,000, and sent to England. The greater portions of both vessel and cargo broke away and sank in deep water after the wreck.

Hon. E. R. Bowring, St. John's, Nfld., on his recent return from Great Britain, announced that at the annual meeting of Bowring & Co., held at Liverpool, it was decided to build a 13-knot vessel to take the place of the wrecked s.s. Silvia on the New York, Halifax and St. John's route, and that the order had been placed in Glasgow, Scotland.

The crew of the wrecked Lunenburg, N.S., schooner Edith R. Balcom have been landed at Boston, Mass., by the Buenos Ayres s.s. Hyades. When the crew rowed ashore after the sinking of the vessel, they were arrested by officials of the Argentine Republic and kept under arrest on a charge of poaching, until the intervention of the British Consul.

The paddle-wheel steamer Aberdeen was destroyed by fire at Cole's Island in the St. John River June 17. She was built at St. John, N.B., in 1894, her dimensions being: Length, 140.2 ft.; breadth, 22 ft.; depth, 4 ft.; tonnage, 244 gross, 137 register, with engine of 17 n.h.p. The vessel was owned in St. John, and was valued at $10,000, and insured for $3,000.

The Dominion Government survey steamboat Gulnare will operate, during the summer, in the Gulf of St. Lawrence, with Dr. W. Bell Dawson in charge of the survey staff. The vessel has been equipped with an automatic steam winch, having a cable 500 fathoms long. This winch automatically slackens and tightens the cable as the currents change, when the vessel is anchored in deep water.

The Interprovincial Navigation Co.'s s.s. Lady Eileen, plying between Campbellton, N.B., and Gaspe ports, ran on the rocks at Newport Island, Baie des Chaleurs, and sank, June 7, all the passengers and crew being saved. She was built at Glasgow, Scotland, 1905, her dimensions being: Length, 168.2 ft.; breadth, 31 ft.; depth, 19.6 ft.; tonnage, 921 gross, 526 net, with engine of 104 n.h.p., driving a screw. It is stated that the company intends placing a larger and faster boat on the same route. The company receives an annual subsidy of $12,500 from the Dominion Government for the service.

In the House of Commons recently, a question affecting the interests of the sailing vessel owners of the Maritime Provinces as against the owners of steamships engaged in the coal-carrying trade was discussed. It appears that preference in loading is given to steamships by colliery managers, with the result that sailing vessels are being driven from the trade. This affects Prince Edward Island particularly, as almost the entire coal-carrying trade of the Province is done by shallow-draught sailing vessels. At the recent session of the P.E.I. Legislature a resolution was carried asking the Dominion Parliament to pass such legislation as would give sailing vessels equal right with steamships. The Minister of Marine pointed out that the matter was under the consideration of the Nova Scotia Government, and doubtless some arrangement would be made with the owners of these private wharves which would result in removing the reported grievance.

Province of Quebec Marine.

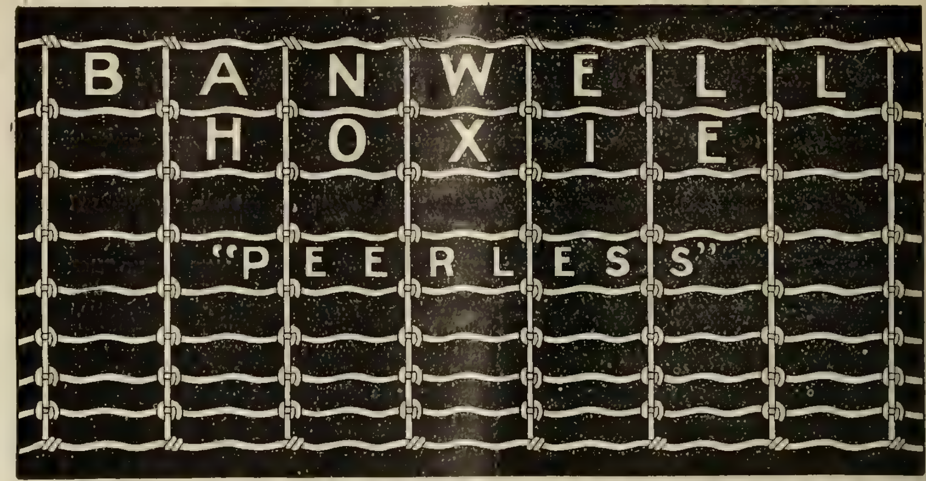
M. Kenny, President of the Quebec Ship Laborers' Benevolent Society since 1903, has resigned.

M. C. Bezner and J. A. Demers have been appointed Government wharfingers for Ste. Anne de Bellevue and Coteau Landing, Que., respectively.

The Richelieu and Ontario Navigation Co.'s s.s. Quebec has resumed her running between Quebec and Montreal, after having undergone extensive alterations.

The St. Lawrence Canadian Navigation Co., Montreal, has changed its headquarters to Quebec, and increased the number of directors from seven to nine.

The International Pulpwood Co., of Quebec, has purchased the U.S. tug Peter Smith,



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and has had some repairs carried out at Polson's Iron Works, Toronto.

The work of removing the Crane Island flats has been completed, after the dredges have been occupied on it for two years. There now is a clear 30-ft. channel over the spot.

The Dominion Government tug Hercules, built by the Polson Iron Works, Toronto, for use on public works at Quebec, arrived at that port June 4. The officers in charge are: Captain, A. Lessare; chief engineer, F. Belanger.

Doutre and Lavigueur, Ltd., has been incorporated under the Quebec Companies Act, with a capital of $49,000, and office at Belœil, Que., to carry on the business of lumbermen, etc., and in connection therewith, to purchase or otherwise acquire and operate steam and other vessels, wharves, etc.

Capt. Nebolsine, naval attache of the Russian Embassy at Washington, D.C., as the guest of the Minister of Marine, took a trip up the St. Lawrence River June 14, thus closing a general inspecting tour of the Canadian and U.S. ports for the purpose of studying the development of navigation, prior to returning to Russia.

The Beauharnois Canal, which was superseded as a part of the St. Lawrence series of canals by the construction of the Soulanges Canal, has been leased by the Dominion Government to W. C. McIntyre and E. C. Robert. The lease was dated Dec. 10, 1907, according to the answer given to a question in the House of Commons by the Minister of Railways and Canals.

Bouchard Bros., of Quebec, have purchased the North American Steamship Co.'s steamship Restigouche, and, it is stated, will run her as a passenger boat between Montreal, Quebec, Paspebiac and Pictou. She was built at Glasgow, Scotland, in 1877, her dimensions being: Length, 229.7 ft.; breadth, 31 ft.; depth, 16.1 ft.; tonnage, 945 gross, 463 net; with engines of 180 n.h.p.

On the discussion recently of the bill for the encouragement of the construction of dry docks, the Government was urged to make an exception in the case of Montreal, and to build and control a dry dock there. Hon. W. S. Fielding, in reply, said that the bill represented the general policy of the Government in the matter, but if any exceptional cases arose, each would be dealt with on its merits.

The St. Lawrence and Atlantic Fish Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $600,000 and office in Montreal, to carry on the business of dealers in fish and products of the sea, and in connection therewith to own and operate vessels of all kinds, and act as carriers by land and water. The provisional directors are: B. Hubert, J. E. Lemire, J. A. L'Heureux, L. W. Scott, J. A. Kircaldie, Montreal.

At the annual meeting of the Ship Workmen's Mutual Benefit Association, of Montreal, June 8, the report showed that there was a membership of about 300, and a balance in hand of $738. The expenditure was chiefly for medical attendance for members. In case of accident members are paid $5 a week for 13 weeks; for sickness, $3 a week for 13 weeks; and in case of death, $100 is paid to the widow or next of kin. The Shipping Federation of Canada provides one-half of the Association's revenue.

A small, unnamed vessel, said to be the smallest to cross the Atlantic Ocean under her own steam, has recently arrived at Quebec, where she is to be operated by a lumber company for towing purposes. She was built at Kirkintilloch, Scotland, her dimensions being: Length, 69 ft.; breadth, 15 ft.; depth, 8.9 ft., with a draught of 7 ft.; tonnage, 49 gross. Her engine is of 28 n.h.p., requiring a consumption of 2½ tons of coal a day, for a speed of 9½ knots an hour. The total crew consisted of a captain and six men.

The Ha! Ha! Lumber Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $45,000, and office at St. Alexis, Que., to carry on a general lumber business, saw mills and other manufactories for the finishing of wood products, and in connection therewith to own and operate steam and other vessels, and to do a general transportation business between points in Canada and the U.S. The provisional directors are: B. J. Kaine, Quebec; T. B. Pontbriand, Sorel, Que.; G. L. Wells, F. L. Wells, Fulton, N.Y.; M. H. DeWitt, Millinocket, Me.

The Quebec Transportation and Forwarding Co., of Quebec, which is composed of J. S. Thom, M. J. and W. J. Hackett, launched on the River St. Charles, June 16, a barge 150 ft. long, 30 ft. beam, and 12 ft. hold, specially adapted for carrying of pulpwood, lumber, coal, etc. The barge was christened Katie H. by Miss Katie Hackett, the little daughter of the Vice-President, M. J. Hackett. A launch is rarely witnessed in Quebec now, and this was the first side launch in that district. The Katie H. is strongly constructed of oak, with 10 massive steel beams, and was built from the plans and specifications of W. J. Hackett, Manager of the company, who personally supervised the construction. The barge is built on an entirely new design, and is so constructed as to endure the strain of its entire cargo aground

The Don de Dieu, a facsimile of Champlain's ship, is rapidly nearing completion, and will be ready in good time to perform the part she is to take in the Quebec Tercentenary celebration. Her hull is substantially built, but her quaint appearance, with her lofty stern and forecastle, attracts a good deal of attention. The fitting of the sails has been entrusted to A. Petrie, Quebec. The vessel has three masts, the fore and main masts carrying two square sails each, while the mizzen mast is supplied with a lateen sail only. There are also a jib, and below the bowsprit a water sail, which is for use when the ship is running before the wind, making seven sails in all. Nautical men consider that the amount and shape of the canvas she carries would drive her at a good speed before the wind, but that in a beat to windward the vessel would make very poor headway. They think it was no easy matter to have navigated a ship with that rig across the Atlantic, especially if much head winds were encountered on the passage.

Ontario and the Great Lakes.

The Niagara Navigation Co. has declared an interim dividend of 4%, payable July 2, to shareholders of record June 15.

The Montreal Transportation Co.'s tug Bartlett has arrived at Kingston The voyage from the Clyde occupied 14 days.

The Dominion Public Works Department has under consideration, tenders for the construction of two breakwaters at Cobourg.

The steamboat Arthur Carew, which was recently launched at Lindsay, will, when completed, run during the season on the Kawartha lakes.

During May, 2,514,575 bush. of grain were shipped through the St. Lawrence canals, this being an increase over the amount shipped in May, 1907.

The Montreal and Lake Erie Steamship Co.'s steamboat City of Montreal ran aground at Farran's Point, June 4, and was released by wreckers.

The s.s. Turbinia, running between Toronto and Hamilton, created a record recently, making the trip from wharf to wharf in 1 hr. 59 mins.

The Reid Wrecking Co., of Sarnia, which was awarded the contract for raising the steamboat Houghton, recently sunk at Bar Point, has completed the work.

R. Weddel & Co., Trenton, contractors for the construction of the new western entrance to Toronto harbor, commenced operations there June 25.

Ontario No. 1, the car ferry steamboat plying between Cobourg and Charlotte, N.Y., was recently presented with burgees by the citizens of Cobourg.

The Niagara, St. Catharines and Toronto Navigation Co.'s steamboat Garden City was towed into Port Dalhousie, June 1, owing to her engine having broken down.

The Calvin Co.'s steamship D. D. Calvin, in passing through the Welland Canal recently carried away the gates of lock 18. Traffic was suspended until the repairs were completed.

The Kingston Shipping Co.'s steamship Prince Rupert arrived in Montreal recently from Glasgow, Scotland, and has been placed in service on the Montreal-Fort William route.

Captain W. A. McLeod, formerly in the Wolvin Co.'s service in the U.S., has sailed for England to bring out a new vessel now nearing completion at Newcastle-on-Tyne, for Canadian owners.

The Government dredge Sir Wilfrid Laurier, which sank some time ago, and was subsequently raised, was recently launched a second time at the Polson Iron Works, Toronto, where she is being re-constructed.

The Canadian North-West Steamship Co.'s steamboat Neebing was held up in the Welland Canal, June 1, on a summons for non-payment of wages. Order for payment was made and the vessel allowed to proceed.

The electrical equipment for the operating of the Welland Canal locks is now being installed. It is estimated that 3 hours will be saved on each passage by the improvement. The machinery was made by M. Beatty & Sons, Welland.

Press reports recently stated that the Northern Navigation Co.'s steamship now under construction was to be named Superioric, but we are advised that no name has been settled on, the intention being to have a competition to decide.

The Collins Inlet Lumber Co. has purchased the schooner White Oak from D. W. Spence, Southampton. She was built at Oakville in 1867, her dimensions being: Length, 111 ft.; breadth, 24.8 ft.; depth, 9.5 ft.; 180 tons register.

Capt. Moller, compass adjuster for the Government, has been appointed Canadian inspector for the British Marine Underwriters' Association, and left Toronto recently for Georgian Bay ports on a tour of inspection of vessels plying on the upper lakes.

In presenting a number of additional plans and diagrams of the projected Georgian Bay ship canal to the House of Commons, the Minister of Public Works said he hoped very soon to have the remainder of the plans and the final report of the survey ready for presentation.

The Mutual Steamship Co.'s steamship Acadian has arrived from Glasgow, Scotland, and been placed in service. She is one of the largest vessels that have passed through the locks. Her dimensions are: Length, 257.6 ft.; breadth, 44 ft., draught, 20 ft., while the Welland canal locks are 260 ft. long by 45 ft. wide.

S. Buchanan, at one time through freight foreman when the C.P.R. steamboats were first placed on the lakes, and latterly Superintendent of Terminals and Ferries at Windsor, Ont., for the same company, has

C.P.R. LANDS

THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00 " "
Map No. 5—South-Western Alberta	8.00 to 15.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00 to 25.00 per acre.

All prices are subject to change without notice.

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160 Acres	at $ 8.00	per acre, cash payment	$191.70	first year's interest	$65.28	and nine instalments of	$160.00
" "	9.00	" "	215.70	" " "	73.46	" "	180.00
" "	10.00	" "	239.70	" " "	81.62	" "	200.00
" "	11.00	" "	263.60	" " "	89.78	" "	220.00
" "	12.00	" "	287.60	" " "	97.96	" "	240.00
" "	13.00	" "	311.55	" " "	106.10	" "	260.00
" "	14.00	" "	335.60	" " "	114.32	" "	280.00
"	15.00	" "	359.50	" " "	122 44	" "	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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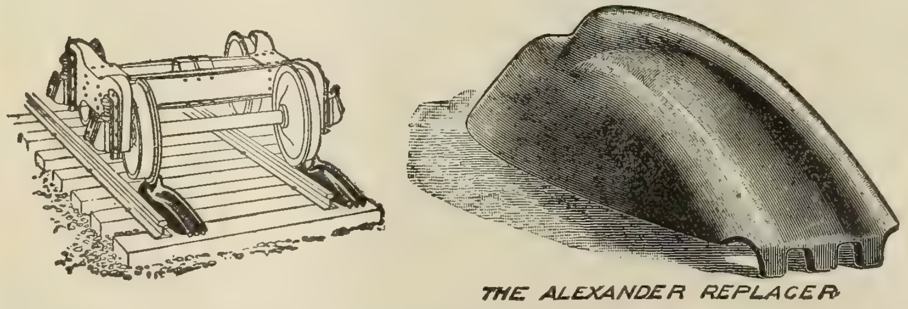
Arriving on Grand Trunk Railway or Wabash Rd., at Niagara Falls, Ont. Hotel bus meets all trains or take trolley to hotel—7 minutes.

Arriving on Michigan Central Rd., Canadian Pacific Railway, at Victoria Park station—Hotel bus meets all trains, only three minutes' walk from station to hotel.

International Railway (trolleys), connecting with Niagara Navigation Co. steamers at Queenston, to or from Toronto, pass the door.

IMPORTANT

Guests coming to the Hotel should see to it that they are taken to The Clifton Hotel, CANADIAN SIDE, and also that their mail is addressed "Care of The Clifton Hotel, Niagara Falls, CANADA." To insure prompt delivery, don't forget to make CANADA plain in the address.



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DRILLS, TOOLS, ETC.

DIVIDEND NOTICE.

NIAGARA NAVIGATION CO., LIMITED.

Notice is hereby given that an interim dividend of four per cent. (being at the rate of eight per cent. for the year), has been declared upon the capital stock of this Company, and the same will be payable on July 2nd, 1908. The transfer books will be closed from June 16th to June 30th, 1908, both days inclusive. By order of the board.

B. W. FOLGER, Manager.

Toronto, June 12th, 1908

Quebec's Greatest Year.

LAKE ST. JOSEPH HOTEL.

Before and after the Tercentenary, THE hotel is the LAKE ST. JOSEPH, in Laurentian Mountains; 100 rooms; 50 minutes from Quebec; station in grounds; special train service; boating, fishing, tennis, golf, croquet; all electric appliances; telegraph. Rates, $2.50 up. Best New York management. Write for booklet. Manager, Lake St. Joseph Hotel, Quebec.

been appointed Superintendent of the C.P.R. Upper Lakes service, at Owen Sound, Ont., succeeding Lincoln Smith, transferred to Montreal.

The Brockville Navigation Co.'s steamboat Brockville has been sold to a Deseronto syndicate, and it is said she will be used on a service to Bay of Quinte ports. She was built at Toronto in 1898, her dimensions being: Length, 105 ft.; breadth, 21.5 ft.; depth, 5.7 ft.; tonnage, 191 gross, 88 register; and has engine of 14 n.h.p. driving a screw

The steamboat Ella Ross, formerly owned by the Rathbun Co., Deseronto, has been sold to C. A. Phillips, Parry Sound, and will run this season between Midland, Parry Sound, and Point au Baril. She was built at Montreal in 1879, her dimensions being: Length, 99.2 ft.; breadth, 27.8 ft.; depth, 6.4 ft.; tonnage, 228 gross, 125 net, with engine of 85 n.h.p. driving paddle wheels.

The U.S. Lake Survey gives the levels of the lakes in feet above tide water for May as follows: Superior, 602.07; Michigan and Huron, 581.36; Erie, 573.51; Ontario, 248.46. Superior is 4¾ ins., Michigan and Huron 6½ ins., Erie 3½ ins., and Ontario 5¼ ins. higher than in April, and compared with the average for 10 years, Superior is 3¼ ins. lower, Michigan and Huron 8 ins. higher, Erie about 12 ins., and Ontario 25¾ ins. higher.

The Algoma Warehousing Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $40,000, and office at Sault Ste. Marie, to carry on the business of warehousemen and wharfingers, to purchase and control conveyances of all descriptions for the transportation of goods by land and water. The provisional directors are: C. W Thompson, T. H. Hunter, J. I. Grover, E. P. Seon, E. W. Wright, Toronto.

The Western Shipping Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $5,000 and office at Toronto, to carry on a shipping business in all its branches, and in connection therewith, to carry on a freight and general agency business; to build, purchase and otherwise acquire and operate vessels of every description. The provisional directors are: J. W. Norcross, L. Kinnear, J. McCullough, S. R. Norcross, Port Colborne, Ont.; R. M. Wolvin, Duluth, Minn.

The Atlantic Fruit Co., Inc., with headquarters in Delaware, U.S., has been licensed under the act respecting extra-provincial corporations, to carry on its business in Ontario, utilizing capital to the extent of $5,000, with J. H. Sheckles, Toronto, as its attorney. It is authorized to carry on a forwarding and warehousing business, and to build, purchase or otherwise acquire, and operate, steam and other vessels, wharves, docks, piers, floating dry docks, marine railways, etc.

The Ontario and Western Navigation Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $50,000, and office at Toronto, to build, purchase or otherwise acquire and operate steam and other vessels, to carry mails, to employ ships between ports, to purchase or lease docks and warehouses, and to carry on the business of merchants, carriers by land and water, shipowners, etc. The provisional directors are: F. W. Wheeler, R. McKay, A. Dods, G. Grant, A. L. Bitzer, Toronto.

Justice Teetzel made a final winding-up order at Toronto, June 18, in the matter of the Lake Ontario Navigation Co., and for offering for sale by public auction of the s.s. Argyle, formerly known as the Empress of India, at a reserve price of $11,000. The matter has been kept before the courts for a considerable period, and in the meantime the Argyle, practically the only asset of the company, has deteriorated rapidly. She was built at Picton, Ont., in 1899, her dimensions being: Length, 185.1 ft.; breadth, 26 ft.; depth, 9.7 ft.; tonnage, 700 gross, 374 net, with engines of 274 n.h p., driving paddle wheels.

An order-in-council of June 5 making regulations regarding the ferry between Windsor, Ont., and Detroit, Mich., provides that the limits on the Canadian side shall cover the territory between the west side of Ferry St. and the east side of Ouellette St., and on the U.S. side, some point in Detroit to be fixed by the local authorities. The vessels used must be substantial, seaworthy steamers of not less than 90 ft. keel and 28 ft. beam, with engine of not less than 400 n.h.p. Provisions are also made for landing stage accommodation, fares to be charged, observation of customs regulations, etc. The license for the operation of the ferry will be granted for 10 years from Oct. 3, 1908.

F. T. Hodgson, Collingwood, in a letter to the Toronto Globe, June 20, commenting on the Minister of Railways' proposals in regard to the construction of a new Welland canal, questions the wisdom of carrying out such a project at the point named, on the ground that the existing canals there would be rendered useless. He contends that the present canal is of sufficient depth and width to serve the interests of the country adjacent to it, and advises rather that connection should be made between Georgian Bay and Lake Ontario, by way of Lake Simcoe. There is no doubt that such a proposal has its attractive points, and one would think that the people to take the initiative in bringing all the facts before the Minister of Railways are those of Collingwood, Barrie, and Toronto, who would reap immense advantages, should such a work be undertaken.

Manitoba, Saskatchewan, Alberta, Etc.

The Southern Alberta Navigation Co.'s steamboat City of Medicine Hat collided with one of the piers of the traffic bridge over the Saskatchewan River, at Saskatoon, Sask., June 14, and turned on her side and sank. On account of the high water, the re-floating of the vessel is considered difficult.

William Robinson Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $300,000, and office in Winnipeg, to deal in ties, telegraph and telephone poles, etc., and to build, purchase or otherwise acquire steam and other vessels, and to carry on a general transportation business for passengers and freight. The provisional directors are: W. Robinson, K. A. Robinson, R. G. Affleck, Winnipeg; J. W. Jones, W. D. Jamieson, Selkirk, Man.

The steamboat Alberta, of Prince Albert, Sask., left there recently on a trip to Winnipeg, a distance of about 1,000 miles, through practically unknown waters. The most difficult part of the route is near the mouth of the Saskatchewan River, through the nine miles of rapids. There is a fall of about 100 ft., and it is stated that this is the first time an attempt to navigate it with a steamboat has been made. Capt. Bellefeuille is in charge and J. Neill is chief engineer. The Alberta is a paddle-wheel steamer, with engine of 15 n.h.p. She was built at Prince Albert in 1904, her dimensions being: Length, 130 ft.; breadth, 31 ft.; depth, 4 ft.; tonnage, 315 gross, 214 register. A message was received at Winnipeg, June 16, when the vessel was considerably overdue, that she had been injured in negotiating the rapids, and had been beached for repairs.

B.C. and Pacific Coast Marine.

The navigation of the Yukon opened early in June, the first steamboat being scheduled to leave Whitehorse June 4.

R. Cunningham and Sons' tug Chieftain has returned to Port Essington from Victoria, after having been overhauled and fitted with a new boiler, which was brought from Scotland for that purpose.

The North Vancouver City Council has sent a claim to the North Vancouver Ferry and Power Co. for $2,000, for failure to make the number of trips between North Vancouver and Vancouver, as required by the agreement.

Abernethy and Lougheed, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000, to carry on the business of lumbermen, etc., and in connection therewith to own and operate steam and other vessels.

Press reports state that a company is being organized in North Vancouver, with a capital of $10,000, to purchase or build two fast motor boats capable of carrying 50 passengers each, to run a ferry service between North Vancouver and Vancouver.

The Marion Tug Boat Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $10,000, to purchase the steam tug Marion, and to carry on the business of wharfingers, warehousemen, shipping and general agents, etc.

The B.C. Government recently dealt with applications for a charter for a ferry to ply across the Columbia river at Spillimachene, the ferry limits to extend 2 miles below and above the town, boats to be operated between 7 a.m. and 7 p.m. daily excepting Sundays; the charter to expire June 30, 1910.

A report is current in Victoria that G. T. Symons and Co., who operate the Canadian Mexican Steamship Line, are about to inaugurate a coast service between Victoria, Vancouver and Prince Rupert, and it is stated that an arrangement may be made in this connection with the G.T. Pacific Ry. Co.

The C.P.R. steamboats Okanagan and Aberdeen, it was recently announced, have commenced service on the following routes: The Okanagan; Penticton to Okanagan Landing, daily except Sundays; and Aberdeen; from Okanagan Landing, south on three days, and north three days, time schedule being governed by the business offering.

The paddle-wheel steamer Strathcona, which has been lying up for several years at Vancouver, has recently been sold, and will be utilized in G.T. Pacific Ry. construction service on the Skeena River. She was built at Vancouver in 1898, her dimensions being: Length, 142.4 ft.; breadth, 30.4 ft.; depth, 4 ft.; tonnage, 596 gross, 376 register; with engine of 17 n.h.p.

The B.C. Government has had under consideration applications for a charter, to expire June 30, 1910, for a ferry to ply across the Skeena River at Copper City, situated at the end of the Kitamaat waggon road, near the mouth of the Copper River, the ferry limits to be 2 miles below and above the point named; the boats to be operated between 7 a.m. and 7 p.m. daily except Sundays.

The Denman Island Stone Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000, to acquire certain stone and quarry lands on Denman and Nelson islands, B.C.; to carry on a general quarrying business, and in connection therewith to build, purchase or otherwise acquire and operate steam and other vessels, dry docks, marine railways, wharves, piers, etc.

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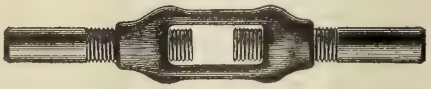

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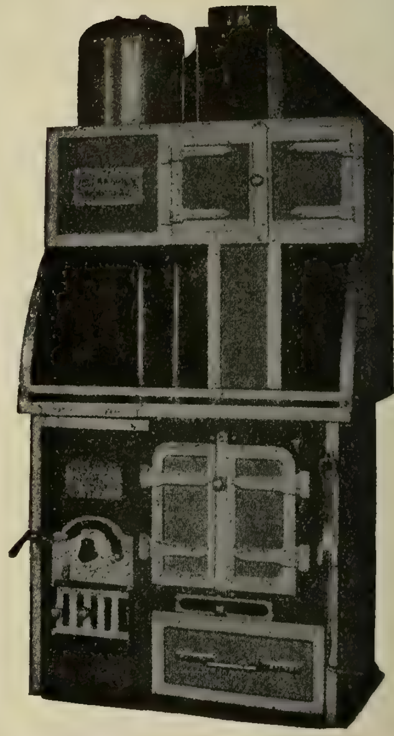

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Notices to Mariners.

The Dominion Department of Marine has issued the following notices:

No. 35. May 26.—92. Nova Scotia, west coast, Cape Fourchu, change in character of light. 93. North Atlantic Ocean, Northumberland Strait, survey steamer engaged in the investigation of currents, to be avoided. 94. Newfoundland, east coast, Conception Bay, Gastries point, lighthouse established.

No. 36. May 26.—95. Quebec, River St. Lawrence, above St. Thomas de Montmagny, gas buoys placed temporarily for dredging purposes. 96. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Cap Charles, change in position of front range lighthouse.

No. 37. May 27.—97. British Columbia, Vancouver Island, west coast, Cape Beale, fog alarm established.

No. 38. May 27.—98. Ontario, Lake Ontario, Simcoe Island, Nine Mile Point, character of light. 99. Ontario, Lake Ontario, entrance to Presqu'ile Bay, Salt Point light discontinued. 100. Ontario, Niagara River mouth, Niagara-on-the-Lake, range lights improved. 101. Ontario, St. Clair River, Point Edward, gas buoy established. 102. United States, Lake Huron, Detroit passage, Point Detour, change in character of light.

No. 39. May 30.—103. Ontario, Lake Ontario, Presqu'ile Point, light improved. 104. Ontario, Lake Ontario, Toronto harbor approaches, buoyage.

No. 40. June 1.—105. General: regulations for the protection of lightships, buoys, beacons and floating lights. 106. Ontario, Lake Erie, Port Stanley, extension of breakwater. 107. Ontario, Lake Huron, Goderich, beacon attached to back range light pole, permanent tower to be built.

No. 41. June 1.—108. Nova Scotia, Cape Breton Island, east coast, off Low Point, gas and whistling buoy established. 109. New Brunswick, east coast, Escuminac Point, change in fog alarm. 110. St. Pierre, Miquelon, Little Miquelon or Langlade Island, Plate Point fog alarm, correction.

No. 42. June 5.—111. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Batiscan traverse, alterations in buoyage. 112. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Three Rivers, range lights established.

No. 43. June 8.—113. Quebec, Gulf of St Lawrence, Cape Magdalen, new lighthouse, change in character of light.

No. 44. June 9.—114. Newfoundland, north end, Cape Bauld, new tower, intended change in character of light. 115. Newfoundland, east coast, Bay Bulls, Bull Head, lighthouse established. 116. Newfoundland, east coast, Togo Island, Rags Island, light established. 117. Newfoundland, west coast, St. George Bay, St. George harbor, Sandy Point, Harbor Point, change in character of light.

No. 45. June 11.—118. British Columbia, Vancouver Island, west coast, Estevan Point, intended light and fog alarm. 119. British Columbia, north Skeena passage, Inverness, buoy established, beacon established.

No. 46. June 15.—120. Ontario, Georgian Bay, Meaford, harbor improvements, lighting arrangement.

No. 47. June 17.—121. British Columbia, Chatham Sound, gas-lighted beacon moved from Greentop Island to Holland Island. 122. United States of America, Washington, Puget Sound, Rich passage, Orchard rocks, beacon replaced by bell beacon. 123. Alaska, Wrangell Strait, Prolewy rock, light established.

No. 48. June 18.—124. Nova Scotia, south coast, approach to Port Felix, Flying Point shoals, change in position of bell buoy. 125. Nova Scotia, Cape Breton Island, east coast, Main à Dieu bay, Mad Dick shoal, bell buoy established. 126. New Brunswick, east coast, Miramichi bay, Portage Island, change in character of light.

No. 49. June 19.—127. Nova Scotia, west coast, Pubnico harbor Beach point, change in character of light. 128. Nova Scotia, Cape Breton Island, east coast, Sydney harbor, Low point, change in character of light. 129. New Brunswick, north coast, Chaleur Bay, Heron Island, change in position of lighthouse, light improved.

No. 50. June 22.—130. Nova Scotia, Northumberland strait, Cape George, new lighthouse, change in character of light.

No. 51. June 24—131. Ontario, Ottawa River, Lake Deschenes, Britannia, light discontinued. 132. Ontario, Detroit River, Limekiln crossing, north light vessel No. 65, color of lights changed. 133. United States of America, Detroit River, Grassy Island, south channel, rear range light, characteristic changed. 134. United States of America, Lake St. Clair, Ile aux Peches, range lights established, temporary lights withdrawn. 135. United States of America, Lake St. Clair, Anchor Bay approach, gas buoy established.

The following notices have been issued by the U.S. hydrographic office:

No. 20 May 16.—764. Detroit River, Grassy Island, south channel, rear light, characteristic changed.

No. 21. May 23.—805. Lake St. Clair, Anchor Bay approach, intended gas buoy.

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Welland Canal Enlargement.

During the discussion of the estimates for canals in the House of Commons, June 11, the question of the deepening of the Welland Canal was raised. The Minister of Railways and Canals was asked if the Department had any estimate or investigation made as to the cost entailed in deepening the Welland Canal to 25 ft. draft, as had been advocated. The question of deepening the canal, said the Minister in reply, was a pretty large one, and was interlocked with the whole transportation problem. He was free to say that if Canada was to compete for Canadian traffic as well as some of the U.S. traffic, as it was his ambition Canada should do by the St. Lawrence route, the Welland Canal would have to be deepened to 25 ft. If the Welland Canal is so deepened the traffic could be carried to the head of the St. Lawrence canals and there break bulk in elevators, and so compete with the U.S. route. There was an opinion shared by some very prominent engineers that it would be cheaper and better to build an entirely new Welland Canal than to deepen the existing canal. Some engineers said that the route could be shortened several miles by digging a new canal, and that the number of lock gates could be reduced by 75%. So far as he was concerned, any estimate of the cost would be only a guess, but he would not care to undertake it with less than from $25,000,000 to $30,000,000. He was getting some data together, and he hoped to give the House an idea, at an early date, as to the cost of a new canal and the deepening and improving of the existing canal. The benefit of a new canal would be to shorten the distance considerably, and decrease very materially the number of locks. Each lock would be larger, the lifts greater, and the reaches longer.

◆

Vessels Removed from the Register.—The following vessels have been removed from the register, for the reasons assigned: Steam.—Steel Head, Vancouver, B.C., 14 tons, burnt; Welcome, Kenora, Ont., 25 tons, broken up; Wilfred L. Snow, Digby, N.S., 36 tons, converted into a sailing vessel. Sailing.—Annie Laurie, Digby, N.S., 10 tons, broken up; Armenia, Ottawa, 142 tons, broken up; Beatrice, Victoria, B.C., 55 tons, converted into a steamer; Brant, Windsor, Ont., 12 tons, lost; H. T. Walcot, Ottawa, 163 tons, broken up; Helen E. Kenney, St. John, N.B., 294 tons, wrecked; James Gordon, Ottawa, 147 tons, broken up; John Wilson, Ottawa, 158 tons, broken up; Lynx, Chatham, N.B., 11 tons, broken up; Ned, Ottawa, 152 tons, broken up; Ocean Bride, Halifax, N.S., 23 tons, broken up; Ranger, Chatham, N.B., 10 tons, broken up.

Rear-Admiral Kingsmill, who has been appointed to command the Canadian Marine Service, arrived at Montreal, from England, June 8, by the Allan Line S.S. Tunisian.

The House of Commons, at its current session, in addition to the sums already voted on account of the marine interests of the Dominion, and various sums on account of collection of revenue and administration, has voted the following sums for canals: Miscellaneous works not provided for, $4,375; arbitrations and awards, $3,500; surveys and inspections, $2,625.

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie Canals in May:

ARTICLES.			CANADIAN CANAL	U.S. CANAL	TOTAL
Copper	Eastbound	Net tons	....	13,155	13,155
Grain	"	Bushels	2,548,973	2,817,561	5,366,534
Building stone	"	Net tons	....	....	....
Flour	"	Barrels	90,500	533,577	624,077
Iron ore	"	Net tons	39,289	224,593	263,882
Pig iron	"	"	....	2,964	2,964
Lumber	"	M. ft. B.M.	2,811	36,143	38,954
Wheat	"	Bushels	8,417,447	6,388,093	14,805,540
General merchandise	"	Net tons	2,354	7,581	9,935
Passengers	"	Number	458	581	1,039
Coal, hard	Westbound	Net tons	42,006	101,023	143,029
Coal, soft	"	"	78,544	216,896	295,440
Flour	"	Barrels	....	....	....
Grain	"	Bushels	....	700	700
Manufactured iron	"	Net tons	9,554	33,078	42,632
Iron ore	"	"	....	....	....
Salt	"	Barrels	23,005	126,284	149,289
General merchandise	"	Net tons	37,196	37,518	74,714
Passengers	"	Number	889	328	1,217
Vessel passages		Number	507	702	1,209
Registered tonnage		Net	421,284	820,072	1,241,356
Freight—Eastbound		Net tons	357,381	625,647	983,028
" Westbound		"	170,587	407,469	578,056
Total freight		"	527,968	1,033,116	1,561,084

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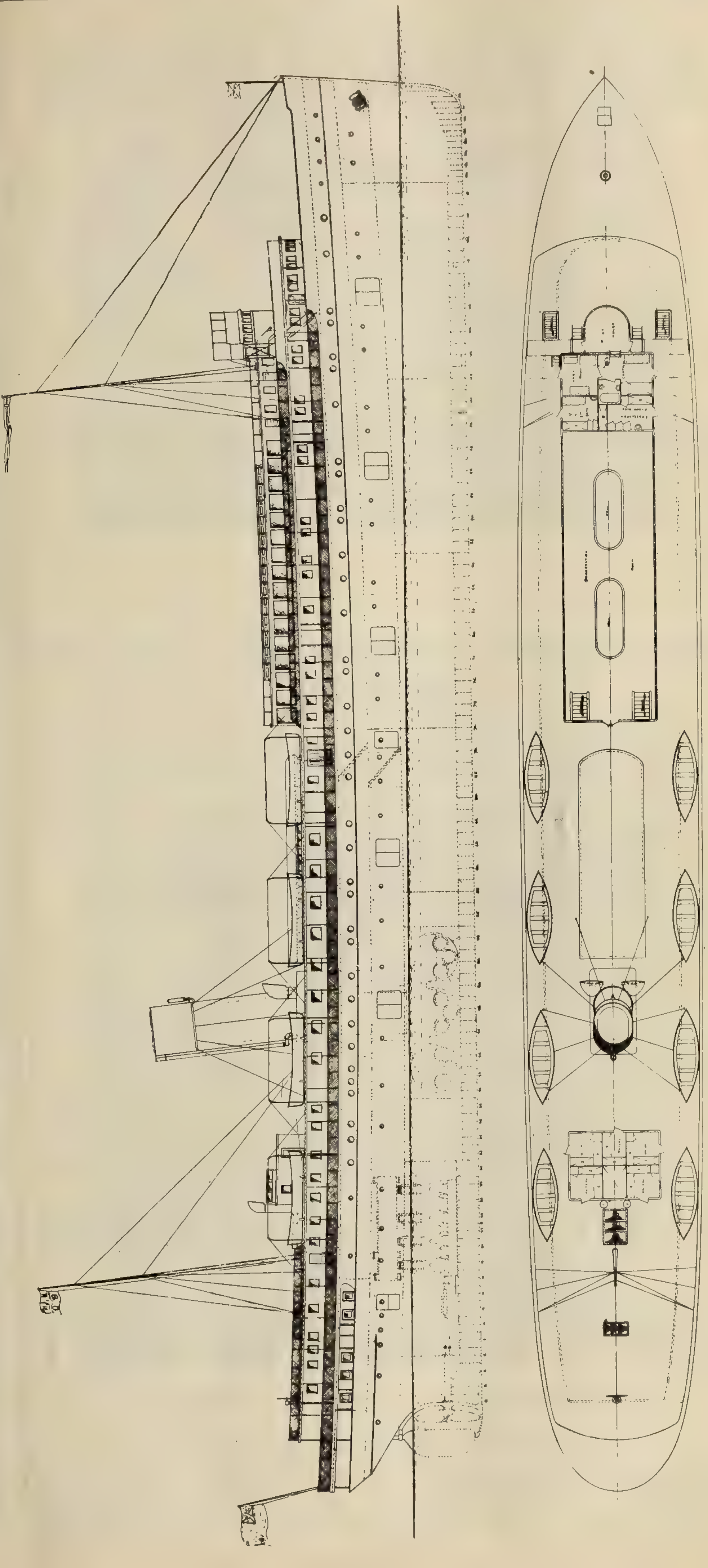
International Waterways Commission.

The report of the Canadian members of the commission for the year ended Dec. 31, 1907, which has been recently issued, states that during the year a joint report was agreed upon with regard to the diversion of water from Lake Michigan by the Chicago drainage canal, and a recommendation made to the U.S. Government to prohibit the diversion of more than 10,000 cubic feet per second for this purpose. It was also recommended that the International boundary through Lake Erie be correctly ascertained and marked by buoys, but no authority has been issued to empower the commission to proceed further. The construction of works to prevent damage to lands by the overflow of the Richelieu River, which was referred to the commission, and in aid of which the Dominion Government had voted $10,000, was dealt with, and considered desirable, provided a movable dam be constructed at St. John's, Que., and so operated that the flood waters of Lake Champlain be allowed to rise to a monthly mean level of 97, and the level be maintained at 95. The application of S. L. Dawley for a permit to construct works in the St. Lawrence near Long Sault Island was refused, and an application by the Grand Falls Power Co., Ltd., to construct hydraulic works on the St. John River was held over. The proposal of the Long Sault Development Co., a U.S. corporation, for power to construct dams, reservoirs, etc., near the Long Sault and Barnhart islands, has been heard, together with protests from the Montreal Board of Trade, the Shipping Federation of Canada, the Dominion Marine Association, the Richelieu and Ontario Navigation Co., and the Calvin Co., Ltd. The works proposed by the company involve the construction of dams across the south channel, the main channel between Long Sault and Barnhart islands, and across the east end of the Little River between the north of Barnhart Island and the Cornwall canal. In addition, it is proposed to move lock 21 in the Cornwall canal, to deepen and improve Little River, and to construct a lock in the south channel. The St. Lawrence River at the point indicated is not navigable for vessels in general, but has been used by R. & O. N. Co.'s boats in passing down the river, by small pleasure boats, and for lumber rafts, etc., the passage up being by way of the Cornwall canal. It is conceded that the interests of navigation are paramount, and must not be affected injuriously, but it was considered that sufficient data had not been brought forward to enable the commission to form an opinion, and further steps are being taken to obtain independent expert advice on the matter. Improvement works on the Rainy River, comprising the erection of a dam and a lock 200 ft. by 50 ft. at the foot of the Long Sault rapids, to maintain navigation on the river during low water periods, were also discussed, and the carrying out of such works recommended. Dr. W. F. King, a member of the commission since its organization, resigned during the year, and W. J. Stewart, Dominion Hydrographer, was appointed in his place.

◆

During April, 2 navigation employes were killed and 9 injured. One of the fatalities was due to drowning and the other to falling material. Six of the non-fatal accidents were due to falling materials, and 3 to falls.

W. J. Milne, heretofore chief officer of the Dominion cruiser Canada, who has been appointed to the command of the cruiser Curlew, was recently presented by the wardroom officers of the Canada with a toilet set, on his promotion.



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Canada Shipping Act.

An act to amend the Canada Shipping Act, which has been introduced in the House of Commons by way of the Senate, contains many alterations no doubt desirable in the best interests of the service. Amongst the amended provisions, which more nearly affect navigation companies, are the additions given hereunder.

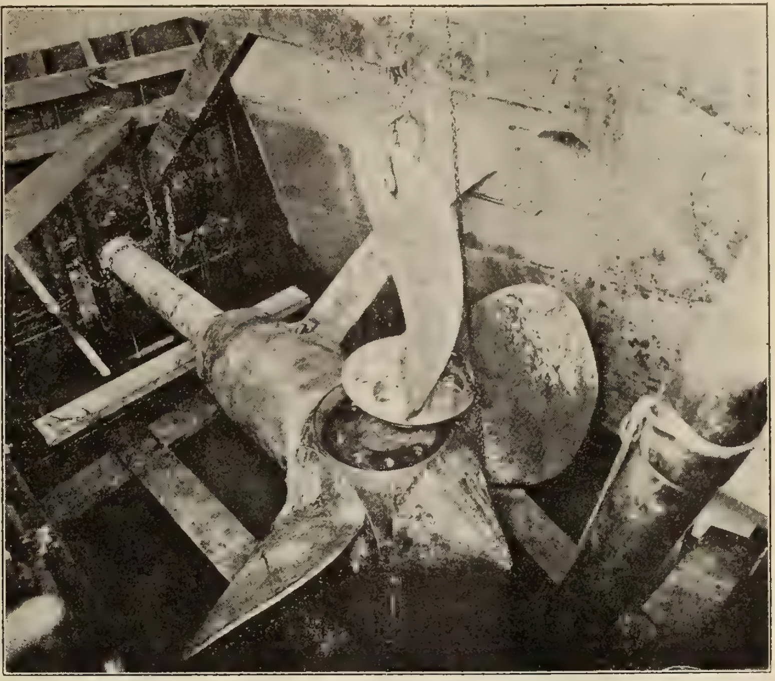
Sec. 75a to the following effect is added to the bill: "The Minister may refuse to admit to the examinations mentioned in the two preceding sections any person domiciled in Canada who is a subject or citizen of a country in which British subjects do not enjoy similar privileges in respect of such examinations." This section is considered to be generally agreeable, and is regarded as a moderate provision in substitution of the bill recently introduced by Mr. Lancaster on similar lines.

Sec. 384 of the Act is amended by reducing the Sick Mariners' Tax (Quebec) from 2c. to 1½c., tonnage duty, payable three times a year. Sub-par. v, par. c., sec. 477, relating to the exemption of vessels "having a draught when loaded not exceeding 16 ft., and employed exclusively in voyages between any port or ports on Lakes Ontario, Erie, Huron, Superior, Michigan, or on any of the waters connecting these lakes, and any port or ports on the River St. Lawrence, or between any ports on the River St. Lawrence," from the compulsory payment of pilotage dues, known as the Fitzpatrick amendment, has been struck out. There appears to be a considerable difference of opinion between the Shipping Federation of Canada and the Dominion Marine Association as to the removal of this paragraph from the bill. The clause was struck out on the representations of the Shipping Federation and the St. Lawrence pilots. The Dominion Marine Association contends that the exclusion of vessels having ports of origin on the lakes from the list of exemptions, is a discrimination against such vessels. It also states that the men already employed on the vessels who are skilled in the navigation of such vessels between Montreal and Lake Superior are quite competent to take their vessels down the lower St. Lawrence; but granting that pilots acquainted with the channels must be engaged between Montreal and Quebec, the Association urges that vessel owners should not be compelled to engage men from the limited and special class of "tour de role" pilots, but should be free to employ from the large number of apprentice pilots available, and that in moving vessels between docks in Montreal harbor no pilot should be required.

Sec. 566 is amended to provide, among other things, that an engineer holding a certificate of competency, shall be engaged on each steamboat having a single cylinder engine of 10 n.h.p. and over, or a double cylinder engine of 20 n.h.p. and over. This provision, though good in itelf, would undoubtedly act harshly in many cases, such as in outlying minor waters, and in cases where men of ample knowledge and experience are at present employed, but who are unable to pass the necessary examinations. The Minister of Marine has given an assurance that in such cases permits will be granted, and it is probable that a further amendment may be made to cover this point. It has been requested that the bill be dealt with by committee before making further progress.

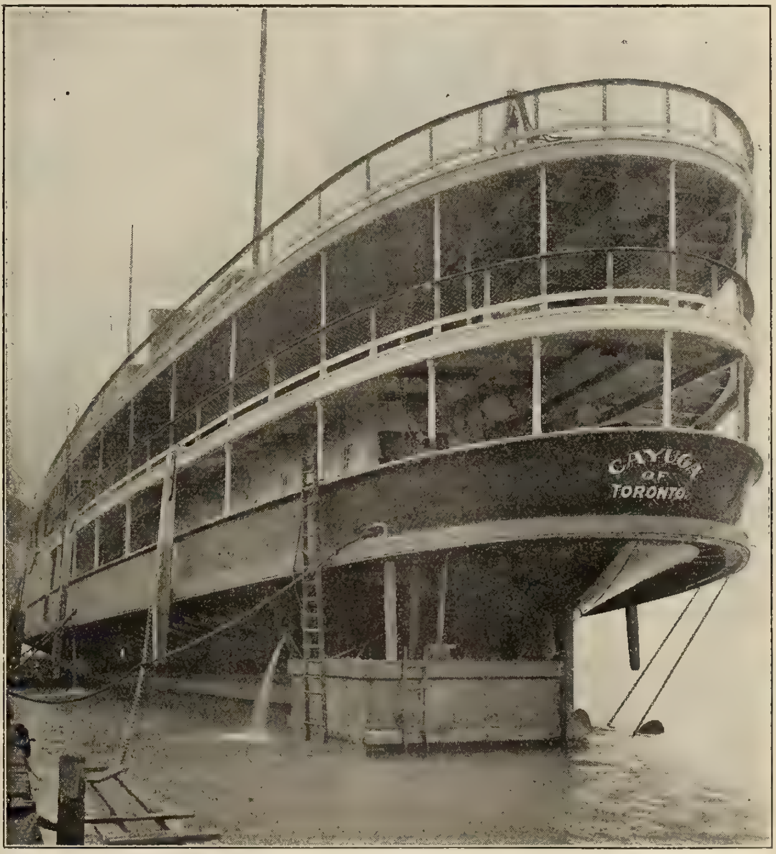
◆

During 1907 there were 1,439 vessels, having a tonnage of 40,827, and valued at $2,841,875, engaged in the Canadian fisheries trade.



Caissons for Repairing Propellers.

In our last issue we gave a very full description, with illustrations, of the caissons built by the Niagara Navigation Co. for use in repairing propeller blades, etc. The company has since supplied us with two additional illustrations. The one given above shows the interior of the port caisson in position, looking forward, one blade of the propeller being suspended ready to attach. The other illustration on this page gives an exterior view of the port caisson in position.



Among the Express Companies.

The Dominion Ex. Co. has opened an office at Parry Sound, Ont.

The Alaska Pacific Ex. Co. has opened an office at Prince Rupert, B.C.

E. S. Van Alstyne has been appointed Agent Canadian Northern Ex. Co. at Saskatoon, Sask.

J. Overend, Agent, Canadian Ex. Co., London, Ont., has returned to business after a considerable absence through illness.

The Board of Railway Commissioners has temporarily approved, until Dec. 1, 1908, the Maritime Ex. Co.'s freight and money receipt form.

The Board of Railway Commissioners has extended to Dec. 1, 1908, the time within

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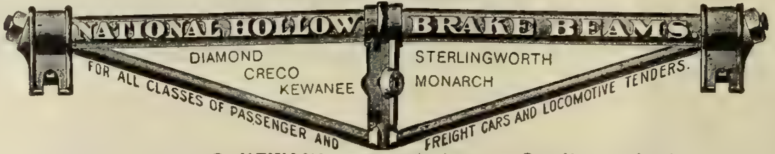
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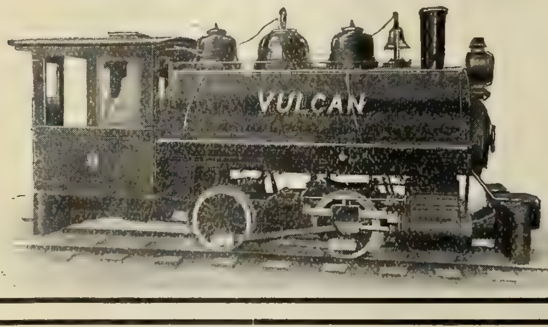

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which express companies shall file and receive approval of tariffs of tolls.

D. J. McKenzie, heretofore Agent, Dominion Ex. Co., Edmonton, Alta., has been appointed Agent, same company, Calgary, Alta., succeeding W. J. Kirby, resigned.

The Canadian Northern Ex. Co. has opened offices for the summer season at Bala, Beaumaris, Hamill's Point, Morinhus House, Port Carling, Port Cockburn, Port Sandfield, Rosseau and Windermere, Ont.

The Board of Railway Commissioners has temporarily approved, until Dec. 1, 1908, the forms of contract of the Canadian, Dominion, United States, Great Northern, Pacific, National and American Ex. Cos.

The Toronto Board of Control informed a deputation of Oakville fruit farmers, June 12, that they had no objection to the railway companies shunting express fruit from the station to the fruit market at Scott St., notwithstanding the order of the Railway Commissioners that cars must not be shunted across Yonge St. between 1 and 2 o'clock p.m.

W. J. Kirby, Agent, Dominion Ex. Co., Calgary, Alta., has resigned and will enter private business there. Mr. Kirby, who was recently appointed agent, same company, at Prince Rupert, B.C., has declined the appointment. He entered the company's service in 1888, and has served at Winnipeg, Vancouver and Calgary. He was recently presented by his fellow employes with a gold locket, suitably engraved.

The Dominion Ex. Co. recently appealed against the decision of the Superior Court, in the case of Rutenberg and others vs. Dominion Ex. Co., when the plaintiffs were given a verdict with costs in their claim for $920.75, for the loss of a trunk and contents while en route between Brantford, Ont., and Winnipeg, Man. After hearing arguments on both sides, judgment was reserved.

The Dominion Ex. Co. has been using the new series of special Pullman horse cars, recently completed at the C.P.R. Angus shops, Montreal, for the conveyance of race horses from the meeting at the Woodbine, Toronto, to that at Blue Bonnets, Montreal. V. G. R. Vickers, Superintendent Dominion Ex. Co., Montreal, said the owners of horses spoke in the highest terms of the new cars and of the service given by the company.

LIST OF STEAM VESSELS REGISTERED IN CANADA DURING MAY, 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
Achates......	126,078	Vancouver, B.C., 1908.....	Screw 42 N.H.P....	100.0	22.9	11.5	209	142	Vancouver, B.C......	M. L. Evans, M.O., Vancouver, B.C.
Alma C.......	122,415	Midland, Ont., 1906.......	" 6 "	60.0	8.2	3.2	19	13	Midland, Ont........	Turner Lumber Co., Toronto.
B. C. P.......	126,082	Vancouver, B.C., 1908.....	" 22 "	80.5	18.0	7.8	121	83	Vancouver, B.C......	The Packers' Steamship Co., Vancouv
*Beatrice.....	100,194	" " 1891.....	" 22 "	64.5	19.6	8.0	77	37	Victoria, B.C........	A. Berquist, Victoria, B.C.
Bedeque......	126,035	Liverpool, N.S., 1905......	" 13 "	62.6	14.9	7.4	50	34	Liverpool, N.S.......	H. A. Rhynard, Pictou, N.S.
Boaz.........	126,083	Vancouver, B.C., 1908.....	" 2 "	31.0	8.2	4.4	9	6	Vancouver, B.C......	W. Mason, Nanaimo, B.C.
Carmel C.....	122,638	Alexandria Bay, U.S., 1900.	" 2 "	36.8	7.1	3.4	9	6	Kingston, Ont........	W. C. Cirtwill, Kingston, Ont.
Chignecto....	125,963	Port Greville, N.S., 1908...	" 16 "	78.6	17.8	7.2	86	36	Parrsboro, N.S.......	J. W. Pugsley, Parrsboro, N.S.
Distributor...	122,393	Victoria, B.C., 1 08.......	Paddle 15 "	136.6	30.4	5.4	607	379	Victoria, B.C........	G. T. Pacific Ry., Montreal.
E. B. Osler...	125,977	Bridgeburg, Ont., 1908....	Screw 203 "	491.3	56.0	26.5	6787	4361	Toronto............	St. Lawrence and Chicago Steam Navigation Co., Toronto.
Elaolite.......	126,084	Vancouver, B.C., 1908.....	" 1 "	31.7	8.3	4.0	10	7	Vancouver, B.C......	W. H. R. Collister, Vancouver, B.C.
Fan. L. Baker	126,092	Detroit, U.S.A., 1888......	" 20 "	64.0	16.5	6.0	54	33	St. Catharines, Ont...	J. Battle, Thorold Ont.
J. P. Douglass	126,079	Vancouver, B.C., 1908.....	Paddle 3 "	83.4	20.4	5.1	237	149	Vancouver, B.C......	A. E. Yates, M.O., Vancouver, B.C.
Lychnis......	126,085	" " 1908.....	Screw 2 "	32.0	8.0	3.5	8	6	" "	H. Hemming, Vancouver, B.C.
Noname......	126,081	" " 1908.....	" 26 "	76.5	18.9	9.3	113	77	" "	B.C. Tie and Timber Co., Vancouver, B.C.
Scowlitz......	126,080	Harrison River, B.C., 1908.	Paddle 17 "	92.0	22.8	4.9	178	112	" "	Rat Portage Lumber Co., Winnipeg.
Steel Head...	126,077	Vancouver, B.C., 1908.....	Screw 5 "	44.5	12.0	5.7	21	14	" "	The Packers' Steamship Co., Vancouve
Transcont'nt'l	126,142	Sorel, Que., 1905..........	" 1 "	46.0	8.3	2.8	9	6	Sorel, Que..........	R. Wilkie, Sorel, Que.
Whistle Wing.	126,074	Muskegon U.S.A., 1907...	" 2 "	39.3	8.2	4.6	14	9	Vancouver, B.C......	H. Cottingham, Vancouver, B.C.

*Formerly a sailing vessel.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING MAY, 1908.

Name.	No.	Where and When Built.	Rig	Length	B'dth.	Depth	Gross Tons	Reg. tons.	Port of Registry.	Owners.
Buema.........	122,288	Lunenburg, N.S., 1908.....	Schr.	54.9	16.4	7.6	....	36	Shelburne, N.S.....	H. R. Swim, M.O., Lockeport, N.S.
C. J. Magill.....	117,178	Cleveland, U.S.A., 1863....	"	139.5	30.4	10.4	....	373	Windsor, Ont......	A. McInnes, Windsor, Ont.
Conrad.........	125,964	Port Greville, N.S., 1908...	"	137.3	32.1	11.2	....	299	Parrsboro, N.S.....	S. J. Soley, M.O., Fox River, N.S.
Dragon Rouge..	125,976	Toronto, 1908............	Dred.	86.0	22.6	7.9	....	203	Toronto..........	F. Simpson, Toronto.
Eddie J........	103,066	Pubnico, N.S., 1895.......	Schr.	49.8	17.0	6.5	....	23	Digby, N.S........	W. Outhouse, Tiverton, N.S.
Fillera..........	122,621	Lemeque, N.B., 1908......	"	37.3	12.8	6.3	....	18	Chatham, N.B......	J. P. Chiasson, Lemeque, N.B.
G. C. Edwards..	122,644	Hull, Que., 1908..........	Barge	119.7	24.1	8.0	....	191	Ottawa..........	Ottawa Transportation Co., Ottawa.
Hayward.......	———	Loggieville, N.B., 1908....	"	65.0	28.0	6.5	....	88	Chatham, N.B.....	R. Loggie, Loggieville, N.B.
Hazel L. Ritcey.	126,102	Lunenburg, N.S., 1908.....	Schr.	95.3	26.0	10.5	....	92	Lunenburg, N.S...	R. Ritcey, M.O., Riverport, N.S.
Helen and Hilda	122,289	Shelburne, N.S., 1908......	Sloop	41.0	13.5	6.3	....	16	Shelburne, N.S....	F. C. McLean, Port Saxon, N.S.
Herschel.......	117,179	Jeruslem, U.S.A., 1872.....	Schr.	121.8	27.2	9.4	....	237	Windsor, Ont......	Peninsular Tug and Towing Co., Wiarton Ont.
J. Burstall......	122,645	Hull, Que., 1908..........	Barge	119.7	24.1	8.0	....	191	Ottawa...........	Ottawa Transportation Co., Ottawa.
Kernwood......	122,290	Shelburne, N.S., 1908......	Schr.	91.0	21.5	9.5	....	[illegible]4	Shelburne, N.S.....	I. A. Lovitt, Yarmouth, N.S.
Lantana........	126,101	Martin's Brook, N.S., 1908.	"	46.5	15.5	6.7	....	17	Lunenburg, N.S...	D. Langille, Martin's Brook, N.S.
M. Unity.......	126,104	Tancook, N.S., 1908.......	"	50.4	13.7	8.0	....	26	" "	O. Fleet, M.O., Blandford, N.S.
Peter England..	122,500	Chatham, N.B., 1902......	Dred.	37.0	12.0	2.5	....	10	Chatham, N.B....	P. England, Chatham, N.B.
*Wilfred L. Snow	121,812	Shelburne, N.S., 1905.....	Schr.	63.5	17.2	7.1	....	51	Digby, N.S........	J. W. Snow, M.O., Granville, N.S.
Winnie Wing...	126,121	Fort Howard, U.S.A., 1867	"	118.0	26.9	9.0	....	183	Kingston, Ont.....	R. B. Shipman, Napanee, Ont.

*Formerly a steamer

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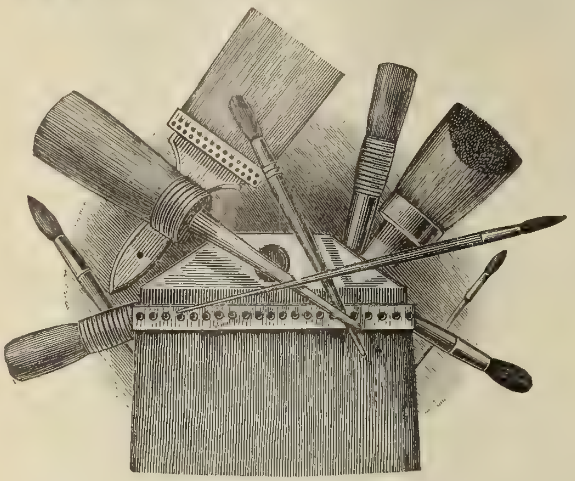

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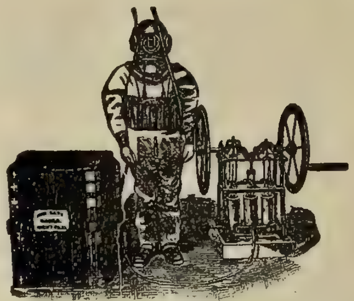

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Telegraph and Cable Matters.

The Canadian Northern Telegraph Co. has opened an office at Stoney Plains, Alta.

J. D. Oppe, manager of the Marconi Wireless Telegraph Co., returned to Montreal recently from Great Britain.

G. M. Robertson, local manager, Western Union Telegraph Co., St. John, N.B., was married, June 9, to Miss A. M. Dunn.

The United Wireless Telegraph Co. has asked the Dominion Government's sanction to erect a station at North Vancouver, B.C.

The C.P.R. Telegraph Dept. has opened offices at Hosmer Mines, B.C.; International Pier, N.S.; Espanola Station, Ont.; Chelsea and Temiskaming, Que.

The Marconi Wireless Telegraph operators have been taken to their stations at Newfoundland, Belle Isle and Labrador by the s.s. Arranmore, which returned to Sydney, N.S., June 10.

Recent dispatches from Dawson, Yukon, state that about 15 miles of the Government telegraph line have been destroyed by forest fires along Lake Lebarge and in the neighbourhood of Minto.

The Nippon Yusen Kaisha's s.s. Tango Maru is the first of the Pacific ocean vessels to instal a wireless telegraph apparatus, and on her westward journey recently was in communication with the Dominion Government's station at Gonzales Hill, while about 300 miles distant.

The C.P.R. telegraphers, on the Eastern Division, have applied for the appointment of a board of conciliation, on the question of an alleged wrongful dismissal of an operator at Megantic. C. S. Campbell, K.C., represents the company, and W. J. T. Lee appears on behalf of the men, with Justin Fortin, of the Supreme Court, Montreal, as chairman.

The Northern Commercial Telegraph Co. is the name adopted by a company which is being formed in Montreal, with the object of constructing telegraph lines throughout Canada. Negotiations are being continued with a view to an early incorporation, and temporary offices have been acquired in the Pelican Building.

The annual convention of the Association of Railway Telegraph Superintendents was held at Montreal, June 24-27. The social side of the meetings included an excursion to Quebec, at the invitation of the C.P.R.; the Richelieu and Ontario Navigation Co. providing transportation at half rates over any part of its system for those who desired to travel to Toronto or Kingston, or for trips to Quebec and the Saguenay. The G.T.R. also provided a trip to Lachine.

We are advised that the G.T. Pacific Ry. telegraph system will shortly be available for commercial service. A substantial high-grade line has been completed from Winnipeg westerly to the end of the steel, about 600 miles, and also on the Lake Superior branch from Fort William, Ont., westerly to mileage 120, the present end of the track. Lines are being strung simultaneously with the laying of track, and it is anticipated that connection with Edmonton, Alta., will be made by the end of the year. A. B. Smith is Manager of Telegraphs, with office at Winnipeg, Man.

It was reported at the end of May that about 350 miles of telegraph lines had been strung west of Winnipeg on the G.T. Pacific Ry., and that progress was being made in the way of stringing a further length at the rate of about five miles a day. The Winnipeg office was reported to be in communication with Touchwood, and it was expected that the line would be completed into Saskatoon, Sask., by the end of June. Telegraph construction work is also being proceeded with west of Saskatoon. Wires for commercial messages are being strung as well as wires for the operation of the line, the intention of the company being to have telegraph offices opened for the use of the general public just as soon as the railway is opened for traffic.

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Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Aerated Waters
E. L. Drewry........................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co...................Toronto.
Canadian Westinghouse Co......Hamilton Ont.

Ales
E. L. Drewry........................Winnipeg.

Alloys
Goldschmidt Thermit Co..............Toronto.

Angle Bars
Hamilton Steel & Iron Co.......Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co........Racine, Wis.

Automobiles
Polson Iron Works, Ltd..............Toronto.

Axes
James Smart Mfg. Co...........Brockville, Ont.

Axe Steel
Montreal Steel Works..................Montreal.

Axles
James Hutton & Co..................Montreal.
Jas. W. Pyke & Co...................Montreal.
Rhodes, Curry & Co..............Amherst, N.S.

Badges
R. Woodman Mfg. & Supply Co....Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co....Boston, Mass.

Beacons
International Marine Signal Co.........Ottawa.

Bearings, Side
Chicago Railway Equipment Co.....Chicago, Ill.

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Standard Explosives Limited...........Montreal.

Boilers
Babcock & Wilcox (Ltd.).............Montreal.
Canada Foundry Co...................Toronto.
Jno. McDougall, Caledonian Iron Works Co. Montreal
Polson Iron Works...................Toronto.

Boilers, Portable
Canada Foundry Co...................Toronto.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.).............Montreal.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.).............Montreal.

Boilers, Water Tube
Babcock & Wilcox (Ltd.).............Montreal.
Jno. McDougall, Caledonian Iron Works Co. Montreal

Boilers Tubes
Jas. W. Pyke & Co...................Montreal.

Bolsters
Dominion Car and Foundry Co........Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited......................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.
N. J. Holden Co., Ltd................Montreal.
Railway Materials Co...........New York City.

Brass and Copper Cloth
The B. Greening Co............. Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited ....Toronto.

Bridges
Canada Foundry Co...................Toronto.
Canadian Bridge Co...........Walkerville, Ont.
Dominion Bridge Co..................Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd..........Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.

Bumping Posts
McCord & Co.......................Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co..New York.

Buoys
International Marine Signal Co.........Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co...............Montreal.

Caboose Heaters
Geo. R. Prowse.......................Montreal.

Car Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Car Closets
Duner Co..........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd................Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co..New York.
Canadian Gold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co...New York.

Car Jacks
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited......................Montreal.

Car Kitchen Equipments
Geo. R. Prowse.......................Montreal.

Car Lighting
Bliss Electric Car Lighting Co...Milwaukee, Wis.
Consolidated Ry. Electric Light. & Equip. Co., N.Y.
Canadian Cold Car Heating & Lighting Co. Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited......................Montreal.
R. Woodman Mfg. & Supply Co....Boston, Mass.

Car Ranges
Geo. R Prowse........................Montreal.

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Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd................Montreal.
F H. Hopkins & Co...................Montreal.

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Wolfe Brush Co.................Pittsburg, Pa.

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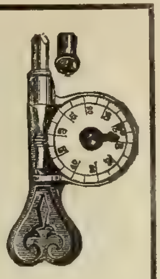
American Car and Equipment Co....Chicago, Ill.
Canada Car Co., (Ltd)...........Montreal, Que.
Crossen Car Mfg. Co.............Cobourg, Ont.
Dominion Car and Foundry Co........Montreal.
J. T. Gardner.....................Chicago, Ill.
Hart-Otis Car Co. (Ltd.)..............Montreal.
Hotchkiss, Blue & Co..............Chicago, Ill.
Kilgore-Peteler Co...........Minneapolis, Minn.
King-Lawson Car Co..................New York.
Preston Car and Coach Co., Ltd.. Preston, Ont.
Rhodes Curry & Co...............Amherst, N.S.

Cars, Coal
Kilgore-Peteler Co...........Minneapolis, Minn.

Cars, Mine
Canadian Fairbanks Co., Ltd..........Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.

Car Windows
O. M Edwards..................Syracuse, N.Y.

Castings
Crossen Car Mfg. Co.............Cobourg, Ont.
Standard Steel Works Co.......Philadelphia, Pa.



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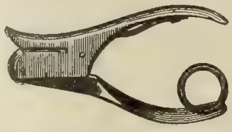

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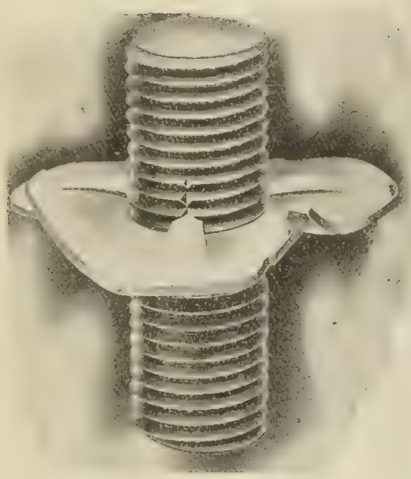

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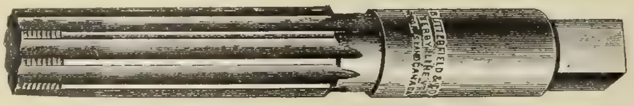

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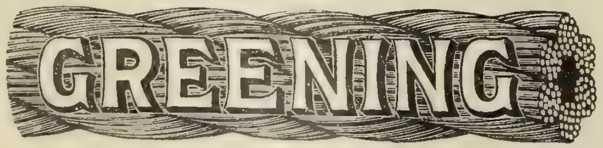

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Kerr Engine Co..............Walkerville, Ont.
St. Thomas Brass Co..........St. Thomas, Ont.

Castings, Iron
Canada Car Co., Ltd...... ....Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co..............Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co ..Mahwah, N.J.

Castings, Malleable
Taylor & Arnold.....................Montreal.

Castings, Steel
Canadian Iron and Foundry Co........Montreal.
Montreal Steel Works................Montreal.
Rhodes Curry & Co.............Amherst, N.S.

Cast-Steel Hammers
American Brake Shoe & F'dry Co...Mahwah, N J.

Cast-Steel Track Tools
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cast-Steel Wrenches
American Brake Shoe & F'dry Co...Mahwah, N.J.

Cement Machinery
Jas. W. Pyke & Co...................Montreal.

Chains
B J Coghlin & Co....................Montreal.

Charcoal Iron Staybolt Bars
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Clevis Nuts
Cleveland City Forge & Iron Co....Cleveland, O.

Coal Haulage Ropes
The B. Greening Co.............Hamilton Ont.

Concrete Mixers and Rock Crushers
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co..............Toronto.

Contractors' Plant
American Car and Equipment Co....Chicago, Ill.
American Hoist and Derrick Co....St. Paul, Minn.
M. Beatty & Sons..................Welland, Ont.
Canadian Fairbanks Co., Ltd.........Montreal.
J. T. Gardner ....Chicago, Ill.
F. H. Hopkins & Co..................Montreal.
The W. H. Kelson Co.................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
Mussens Limited.....................Montreal.
Toronto Pressed Steel Co..............Toronto.

Contractors' Supplies
F. H. Hopkins & Co..................Montreal.
Rice Lewis & Son......................Toronto.
Toronto Pressed Steel Co..............Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.).............Montreal.

Cooking Apparatus
Geo. R. Prowse......................Montreal.

Copperware
Geo. R. Prowse......................Montreal.

Copying Presses
James Smart Mfg. Co..........Brockville, Ont.

Corrugated Furnaces
Continental Iron Works.........Brooklyn, N.Y.

Counter Dusters
Wolfe Brush Co.................Pittsburg, Pa.

Couplers, Car and Locomotive
Acme Railway Equipment Co. ..Philadelphia, Pa.
Dominion Car and Foundry Co.........Montreal.
Latrobe Steel & Coupler Co.....Philadelphia, Pa.
McConway & Torley Co............Pittsburg, Pa.
National Malleable Castings Co. ..Cleveland, Ohio.
Taylor & Arnold ....Montreal.
Washburn Steel Castings & Coupler Co.,
........................Minneapolis, Minn.

Cranes, Locomotive
American Hoist and Derrick Co....St. Paul, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co..........Toronto.

Cross Arm Braces
Canadian General Electric Co..........Toronto.
Toronto Bolt and Forging Co...........Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co......Toronto.

Crowbars
B. J. Coghlin & Co..................Montreal.
Toronto Bolt and Forging Co...........Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co , Hamilton.

Cuts
Acton Burrows Limited.................Toronto.

Derrick Ropes
Dominion Wire Rope Co...............Montreal.
The B. Greening Co.............Hamilton, Ont.

Derricks
American Hoist and Derrick Co....St. Paul, Minn.
M. Beatty & Sons..................Welland, Ont.
Miller Bros. & Toms.................Montreal.
Mussens Limited.....................Montreal.

Dies
Butterfield & Co.............Rock Island, Que.

Diving Outfits
John Date...........................Montreal.
Mussens Limited ....Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards................Syracuse, N.Y.

Door Signs
Acton Burrows Limited.................Toronto.

Draft Gear
Cardwell Mfg. Co..................Chicago, Ill.
Farlow Draft Gear Co...........Baltimore, Md.
McCord & Co.......................Chicago, Ill.
Standard Coupler Co............New York City.

Drawing Materials
James Foster..........................Toronto.

Dredges
M. Beatty & Sons..................Welland, Ont.

Drills
W. Abbott...........................Montreal.

Drills, Twist
Baldwin Steel Co....................New York.

Dry Goods
The Hudson's Bay Co...........................

Dump Cars (Contractors')
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co..................Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.
King-Lawson Car Co..................New York.
Toronto Pressed Steel Co..............Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co...Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.).............Montreal.

Electric Car Route Signs
Acton Burrows Limited.................Toronto.

Electric Cranes
Babcock & Wilcox....................Montreal.
Canada Foundry Co.....................Toronto.
Canadian Fairbanks Co., Ltd.........Montreal.
Dominion Bridge Co..................Montreal.
Mussens Limited.....................Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co...Mahwah, N J.

Electrical Fuses
Standard Explosives Limited.........Montreal.

Enameled Iron Signs
Acton Burrows Limited.................Toronto.

Engineers' Supplies
Canadian Fairbanks Co...............Montreal.

Engines, Gasoline
Canadian Fairbanks Co...............Montreal.
Ontario Wind Engine and Pump Co.....Toronto.

Engines, Hoisting
American Hoist and Derrick Co....St. Paul, Minn.
M. Beatty & Sons..................Welland, Ont.
Canadian Fairbanks Co., Ltd.........Montreal.

Engines, Stationary and Marine
Polson Iron Works.....................Toronto.

Explosives
Standard Explosives Limited.........Montreal.

Express Office Signs
Acton Burrows Limited.................Toronto.

Fencing
Banwell-Hoxie Fence Co........Hamilton, Ont.
Canada Foundry Co.....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd....... Walkerville, Ont.

Fire Brick
Mussens Limited ....Montreal.

Flags
The Hudson's Bay Co...........................

Flour
The Hudson's Bay Co...........................

Fog Signals
International Marine Signal Co..........Ottawa.

Forgings
Canada Car Co., Limited...... ....Montreal.
Cleveland City Forge & Iron Co....Cleveland, O.
Crossen Car Mfg. Co............Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.
Standard Steel Works Co.....Philadelphia, Pa.

Foundry Appliances
Goldschmidt Thermit Co................Toronto.

Fuse Batteries
Standard Explosives Limited.........Montreal.

Fuse Detonators
Standard Explosives Limited.........Montreal.

Gaskets
McCord & Co.......................Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Gates
Banwell-Hoxie Fence Co.........Hamilton, Ont.
Canada Foundry Co.....................Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co...Owen Sound, Ont.
Page Wire Fence Co. Ltd.......Walkerville, Ont.

Glue Brushes
Wolfe Brush Co.................Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co...............Chicago, Ill.

Groceries
The Hudson's Bay Company......................

Hammers
James Smart Mfg. Co...........Brockville, Ont.

Handcars
Canadian Fairbanks Co., Ltd.........Montreal.
Crossen Car Mfg. Co.............Cobourg, Ont.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
Rice Lewis & Son......................Toronto.
Toronto Pressed Steel Co..............Toronto.

Hardware
The Hudson's Bay Co...........................
Rice Lewis & Son......................Toronto.

Headlights
The N. L. Piper Railway Supply Co.....Toronto.
Pyle National Electric Headlight Co.. Chicago, Ill.

Headlinings
Crossen Car Mfg. Co.............Cobourg, Ont.

Hoisting Machinery
American Hoist and Derrick Co....St. Paul, Minn.
Brown Hoisting Machinery Co....Cleveland, Ohio.
Canadian Fairbanks Co., Ltd.........Montreal.

Hoists, Electric
American Hoist and Derrick Co.....St. Paul, Minn.

Hoists (Pneumatic)
Taylor & Arnold.....................Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hallow Staybolt Co. .Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co..........................Chicago, Ill.

Hydrants
Canadian Fairbanks Co., Ltd.........Montreal.
Kerr Engine Co..............Walkerville, Ont.

Illustrations
Acton Burrows Limited.................Toronto.

Inspections
R W. Hunt & Co......................Montreal.

Instruments, Surveying and Engineering
James Foster..........................Toronto.

Interlocking Signals
Montreal Steel Works................Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd...Hamilton, Ont.

Iron, Pig
Hamilton Steel & Iron Co., Ltd..Hamilton, Ont.

Iron Signs
Acton Burrows Limited.................Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Jacks
James Smart Mfg. Co...........Brockville, Ont.

Japans
McCaskill, Dougall & Co.............Montreal.

Journal Bearings
Canadian Bronze Co..................Montreal.
Crossen Car Mfg. Co.............Cobourg, Ont.
Kerr Engine Co..............Walkerville, Ont.
Jas W. Pyke & Co....................Montreal.
St. Thomas Brass Co..........St. Thomas, Ont.

Journal Boxes
N. J. Holden Co., Ltd................ Montreal.
McCord & Co.......................Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co.... ....Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry........................Winnipeg.

Lamps, Incandescent
Canadian Westinghouse Co.......Hamilton, Ont.

Lamps and Lanterns
The Hudson's Bay Company......................
The Hiram L. Piper Co...............Montreal.
The N. L. Piper Railway Supply Co.....Toronto.

Launches
Polson Iron Works.....................Toronto.

Lights, Contractors' and Wrecking
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.

Locomotive Cranes
American Hoist and Derrick Co....St. Paul, Minn.

Locomotive Driver Brake Shoe
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Locomotive Gauges
Taylor & Arnold.....................Montreal.

Locomotive Lagging and Covering
Taylor & Arnold.....................Montreal.

Locomotive Pop Valves
Taylor & Arnold.....................Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co.......Philadelphia, Pa.
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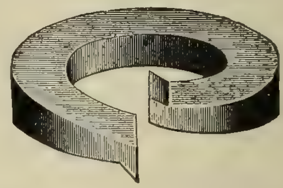

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Canadian Locomotive Co........Kingston Ont.

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Canadian Locomotive Co........Kingston, Ont.
Montreal Locomotive Works (Ltd.)....Montreal.

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Burnham, Williams & Co.......Philadelphia, Pa.
Canada Foundry Co....................Toronto.
Canadian Fairbanks Co., Ltd.........Montreal.
Canadian Locomotive Co........Kingston, Ont.
J. T. Gardner.....................Chicago, Ill.
Hotchkiss, Blue & Co..............Chicago, Ill.
The W. H. Kelson Co..................Montreal.
Lima Locomotive Co.....................Lima, O.
Montreal Locomotive Works (Ltd.)....Montreal.
H. K. Porter Co..................Pittsburg, Pa.
Vulcan Iron Works............Wilkesbarre, Pa.

Locomotive Staybolts
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.
Flannery Bolt Co.................Pittsburg, Pa.

Lubricators
McCord & Co......................Chicago, Ill.
Taylor & Arnold......................Montreal.

Machine Tools
W. Abbott............................Montreal.
Canadian Fairbanks Co................Montreal.

Machinery, Power
Jno. McDougall, Caledonian Iron Works Co. Montreal

Machinery Special
Miller Bros. & Toms..................Montreal.

Machinery, Transmission
Canadian Fairbanks Co., Ltd.........Montreal.
Miller Bros. & Toms..................Montreal.

Manganese Steel Castings
Montreal Steel Works.................Montreal.

Manhole Frames and Covers
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Marine Repairs
Goldschmidt Thermit Co................Toronto.

Marine Supplies
Rice Lewis & Son......................Toronto.

Measuring Tapes
Lufkin Rule Co.................Saginaw, Mich.

Metals
Goldschmidt Thermit Co................Toronto.

Milepost Numbers
Acton Burrows Limited.................Toronto.

Milling Cutters
W. Abbott............................Montreal.
Baldwin Steel Co.....................New York.

Motors
McCord & Co......................Chicago, Ill.

Nickel
The Orford Copper Co.................New York.

Nickel for Nickel Steel
The Orford Copper Co.................New York.

Numbers
Acton Burrows Limited.................Toronto.

Nut Locks
Dunning & Eckenstein.................Montreal.
Positive Lock Washer Co...........Newark, N.J.

Nuts, Square and Hexagon
Canada Foundry Co.....................Toronto.
Toronto Bolt and Forging Co...........Toronto.

Oakum
The Hudson's Bay Company...................

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Canadian Office & School Furniture Co., Preston, Ont.

Office Signs
Acton Burrows Limited.................Toronto.

Oil Furnaces
Railway Materials Co..........New York City.

Oil Tanks
S. F. Bowser & Co. Limited............Toronto.

Oils
Canadian Oil Co.......................Toronto.
Galena Signal Oil Co.. Franklin, Pa., and Toronto.

Packing
Canadian Fairbanks Co., Ltd.........Montreal.
The N. L. Piper Railway Supply Co....Toronto.

Paint Brushes
Wolfe Brush Co...................Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co...................Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co...................Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co...................Pittsburg, Pa.

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Canadian Oil Co.......................Toronto.

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The N. L. Piper Railway Supply Co....Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co..New York.

Pipe Stocks
Butterfield & Co...............Rock Island, Que.

Platforms, Steel
Standard Coupler Co..............New York City.

Ploughs, Contractors'
Mussens Limited......................Montreal.
Toronto Pressed Steel Co..............Toronto.

Pneumatic Tools
N. J. Holden Co., Ltd................Montreal.

Porter
E. L. Drewry.........................Winnipeg.

Portable Boilers
Babcock & Wilcox (Ltd.)..............Montreal.

Printing
The Hunter-Rose Co....................Toronto.
The Mail Job Printing Company.........Toronto.

Pumps
S. F. Bowser & Co., Limited...........Toronto.
Canadian Fairbanks Co................Montreal.
Canada Foundry Co.....................Toronto.
Ontario Wind Engine and Pump Co.....Toronto.
James Smart Mfg. Co.............Brockville Ont.

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M Beatty & Sons...................Welland, Ont.

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F. H. Hopkins & Co...................Montreal.
Montreal Steel Works.................Montreal.

Rails (new)
Dominion Iron & Steel Co...........Sydney, N.S.
Drummond, McCall & Co................Montreal.
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J. J. Gartshore.......................Toronto.
F. H. Hopkins & Co...................Montreal.
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J. J. Gartshore.......................Toronto.
Mussens Limited......................Montreal.
Jas. W. Pyke & Co....................Montreal.

Rail Joints
The Rail Joint Co. of Canada.........Montreal.

Railway Pile Drivers
F. H. Hopkins & Co...................Montreal.
Mussens Limited......................Montreal.

Railway Supplies
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The Hiram L. Piper Co................Montreal.
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W. Abbott............................Montreal.
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Refrigerators
Geo. R. Prowse.......................Montreal.

Rivets, Boiler, Bridge and Structural
Toronto Bolt and Forging Co...........Toronto.

Rolled Wheels
Standard Steel Works Co.......Philadelphia, Pa.

Roof Trusses
Canadian Bridge Co.............Walkeville, Ont.
Dominion Bridge Co...................Montreal.

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F. H. Hopkins & Co...................Montreal.
The Hudson's Bay Co........................

Rotary Snow Ploughs
Crossen Car Mfg. Co..............Cobourg, Ont.

Sash Balances
O. M. Edwards..................Syracuse, N.Y.

Sash Locks
O. M Edwards...................Syracuse, N.Y

Saw Steel
Montreal Steel Works.................Montreal.

Scoria Blocks
W. H. Knowlton........................Toronto.

Scrapers (Wheel and Drag)
Bechtels Limited...............Waterloo, Ont.
F. H. Hopkins & Co...................Montreal.
Mussens Limited......................Montreal.
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Butterfield & Co...............Rock Island, Que.

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Signal House Numbers
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Signals
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N. L. Piper Railway Supply Co.........Toronto.

Signs
Acton Burrows Limited.................Toronto.

Slack Adjusters
Chicago Railway Equipment Co.....Chicago, Ill.

Sledges
James Smart Mfg. Co............Brockville, Ont.

Snow Ploughs
Crossen Car Mfg. Co..............Cobourg, Ont.
Rhodes Curry & Co................Amherst, N.S.

Speedicut High Speed Steel
Montreal Steel Works.................Montreal.

Speed Indicators
R. Woodman Mfg. & Supply Co....Boston, Mass.

Spikes, Railway, Ship or Pressed
Hamilton Steel & Iron Co., Ltd..Hamilton, Ont.
F. H. Hopkins & Co...................Montreal.
Toronto Bolt and Forging Co...........Toronto.

Spreader Cars
F. H. Hopkins & Co...................Montreal.

Spring Dampeners
McCord & Co......................Chicago, Ill.

Springs
B. J Coghlin.........................Montreal.
F. H. Hopkins & Co...................Montreal.
Montreal Steel Works.................Montreal.
Standard Steel Works Co.......Philadelphia, Pa.

Station and Tower Heaters
Wm. C. Baker Heating & Supply Co..New York.

Station Name Signs
Acton Burrows Limited.................Toronto.

Station Seats
James Smart Mfg. Co............Brockville, Ont.

Staybolts, Flexible
Flannery Bolt Co.................Pittsburg, Pa.

Staybolt Iron or Steel Bars, Hollow
Falls Hollow Staybolt Co...Cuyahoga Falls, Ohio.

Staybolt Iron
Taylor & Arnold......................Montreal.

Staybolt Taps
Butterfield & Co...............Rock Island, Que.

Steam Attachments for Car Heating
Wm C. Baker Heating & Supply Co..New York.

Steam Couplers
Safety Car Heating and Lighting Co...New York.

Steam Shovels
M. Beatty & Sons..................Welland, Ont.
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co...................Montreal.
Hotchkiss, Blue & Co..............Chicago, Ill.
Mussens Limited......................Montreal.

Steamship Supplies
The W. H. Kelson Co..................Montreal

Steamships
Polson Iron Works.....................Toronto.

Steamship Signs
Acton Burrows Limited.................Toronto.

Steel
W. Abbott............................Montreal.
Wm. Jessop & Sons................Sheffield, Eng.

Steel, Automobile
Baldwin Steel Co.....................New York.

Steel Buildings
Canada Foundry Co.....................Toronto.
Canadian Bridge Co............Walkerville, Ont.
Dominion Bridge Co...................Montreal.

Steel, Fire Box
Taylor & Arnold......................Montreal.

Steel, High Speed
Baldwin Steel Co.....................New York.

Steel for Springs
James Hutton & Co....................Montreal.

Steel, Nickel, for Nickel
The Orford Copper Co.............New York.

Steel Plates
Jas. W. Pyke & Co.....................Montreal.

Steel Rolling Doors
Mussens Limited.....................Montreal.

Steel, Tool
Baldwin Steel Co....................New York.
W. Jessop & Sons................Sheffield, Eng.
Montreal Steel Works..................Montreal.

Steel Tyres
James Hutton & Co...................Montreal.
Jas. W. Pyke & Co....................Montreal.

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Babcock & Wilcox (Ltd.).................Montreal.

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James Smart Mfg. Co..........Brockville, Ont.

Structural Metal Work
Canada Foundry Co....................Toronto.
Canadian Bridge Co...........Walkerville, Ont.
Dominion Bridge Co....................Montreal.
Montreal Locomotive Works (Ltd.)....Montreal.
Jas. W. Pyke & Co....................Montreal.

Submarine Signals
Submarine Signal Co.............Boston, Mass.

Superheaters
Babcock & Wilcox (Ltd.)..............Montreal.

Switches
Hayes Track Appliance Co........Geneva, N.Y.
Montreal Steel Works..................Montreal.

Switch Lamps
The N. L. Piper Railway Supply Co.....Toronto.

Switch Ropes
The B. Greening Co.............Hamilton, Ont.
F. H. Hopkins & Co....................Montreal.

Switch Stands
Hayes Track Appliance Co........Geneva, N.Y.

Switch Targets
Acton Burrows Limited.................Toronto.

Tanks and Tank Fixtures
Canadian Fairbanks Co...............Montreal.
Canada Foundry Co....................Toronto.
Jno. McDougall Caledonian Iron Works Co. Montreal
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Goldschmidt Thermit Co..............Toronto

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B. J. Coghlin & Co....................Montreal.

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F. H. Hopkins & Co..................Montreal.
Montreal Steel Works.................Montreal
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F. H. Hopkins & Co..................Montreal.

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Track Tools
Canadian Fairbanks Co., Ltd.........Montreal.
B. J. Coghlin & Co...................Montreal.
F. H. Hopkins & Co..................Montreal.
Montreal Steel Works.................Montreal
Mussens Limited.......................Montreal.

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O. M. Edwards.................Syracuse, N.Y.

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Old Series, No. 208.
New Series, No. 126.

TORONTO, CANADA, AUGUST, 1908.

For Subscription Rates, See page 575.

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SUPERHEATING ON LOCOMOTIVES.

At the Master Mechanics' Association meeting at Atlantic City recently the following report was presented by the chairman of the committee on superheating, H. H. Vaughan, Assistant to the Vice-President C.P.R.:

During 1907 comparatively few engines were equipped with superheaters in the United States, although the C.P.R. continued to apply them to all road engines it constructed, 173 in all, bringing the total number of superheater engines on that road to 350, of which 110 are consolidation freight, 192 ten-wheel freight and 48 passenger engines. The most important development in the U.S. has been with the Baldwin or Vauclain superheater, 52 engines having been constructed during the year 1907 equipped with this device. With this exception the only other engines constructed during the year with superheaters were two on the Union Pacific Railway, one of which was equipped with the Vaughan-Horsey smoke-tube superheater, the other with the Union Pacific smoke-box type. A statement of the engines equipped during the year, so far as ascertained, is as follows:

Road.	Type of Superheater.	No. of Engines.
C.R.I. & P. Ry.	Vauclain	1
P.S. & Northern	"	1
Central Ry., Brazil	"	2
Chicago & Alton	"	1
A.T. & Santa Fe	"	49
Central of Georgia	"	1
Union Pacific	Vaughan-Horsey	1
Union Pacific	Union Pacific	1
Canadian Pacific	Vaughan-Horsey	173

J. E. HUTCHESON,
Superintendent Ottawa Electric Railway and President Canadian Street Railway Association.

The Vauclain superheater may now be said to have developed beyond the experimental stage. It is of the smoke-box type, in which the waste heat of the front end gases is utilized to superheat the steam on its way to the cylinders. It consists of two cast-steel headers in the upper and two in the lower portion of the smoke-box, the upper headers having a passage extending from the T-pipe flange at the back of the header to a cavity in the front of the header, which is divided into three chambers by longitudinal and transverse ribs. The lower header is U-shaped in section, divided into three chambers by transverse ribs, the steam-pipe flange opening into the back chambers. The headers are each open on the face, which is closed by a flange plate jointed to the header by bolts. Tubes 1¼ inches in diameter, no. 13 b.w.g. thick, are expanded into the flange plates. The steam passes from the dry pipe to the upper chambers at the front of the upper headers, thence through the tubes to the front chamber of the lower headers and back through other tubes to the lower chamber of the upper header, thence to the middle chamber of the lower header, back to the upper header and thence to the rear chamber in the lower header, from which the steam connection leads to the cylinders. A steel plate partition within the tubes causes the gases issuing from the flue sheet to traverse the superheater tubes on their way to the stack, in order to obtain as much benefit as possible from the heat they contain. This arrangement is evidently somewhat similar to the Schmidt smoke-box superheater, with the exception that the large flue leading from the fire-box to the front end, which in Schmidt's design enabled a high degree of superheat to be obtained, has been omitted, and consequently the only heat available for superheating the steam is that contained in the gases after leaving the evaporating tubes. The Baldwin Locomotive Works have furnished particulars of a test on this superheater conducted on the Chicago, Rock Island and Pacific Railway. The engine tested was a consolidation weighing 237,000 lbs., of which 210,000 lbs. was on the drivers, and the principal dimensions as follows:

Cylinders	22 by 28 in.
Valves	Slide balance.
Boiler, type	Straight.
Boiler, diameter	80 in.
Boiler, pressure per square inch	163 lbs.
Firebox, length	120 in.
Firebox, width	72¼ in.
Heating surface, firebox	179 sq. ft.
Heating surface, tubes	3,658 sq. ft.
Heating surface, total	3,837 sq. ft.
Driving wheels	63 in.

The test consisted of six runs on the Illinois Division between Blue Island and Silvis, a distance of 158 miles, and six on the El Paso Division between Delhart and Tucumari, a distance of 93½ miles. The general averages of the results obtained were as follows:

	Illinois Div.	El Paso Div.
Number of cars	45 loaded, 25 light	37 loaded, 21 light.
Weight of train exclusive of weight of engine and tender	2,327.0 tons	1,833.4 tons.
Number of stops	14.7	3.8.
Time consumed in stops	3 hrs. 16 min.	1 hr. 33 min.
Total time of run	12 hrs. 57 min.	6 hrs. 29 min.
Speed	16.1 M.P.H.	15.5 M.P.H.
Indicated horse-power	821.5	891.6.
Weight of coal (losses subtracted)	33,987.0 lbs.	15,752.6 lbs.
Weight of coal per indicated horse-power, per hour	4.23 lbs.	3.86 lbs.
Weight of coal per ton mile	.091 lbs.	.119 lbs.
Weight of water losses subtracted	217,706.3 lbs.	97,267.7 lbs.
Weight of water per indicated horse-power hour	27.5 lbs.	22.6 lbs.
Weight of water per ton mile	.597 lbs.	.721 lbs.
Equivalent evaporation	7.86 lbs.	7.54 lbs.
Superheat (from initial pressure of cards)	48.8° F.	56.44° F.
Superheat (from boiler pressure	24.63° F.	33.20° F
Temperature of steam chest	386.3° F.	403.6° F.
Boiler pressure	154.4 lbs.	159.8 lbs.
Tractive effort	21,375.0 lbs.	24,404.7 lbs.
Length of run	157.0 miles.	74.5 miles.
Coal per square foot of grate surface per hr.	57.6 lbs.	54.9 lbs.

During the first two runs on the Illinois Division the temperature of the front-end gases in front and back of the superheater were shown to be 534° and 635° F., showing a drop of 101° in passing through the superheater. An interesting comparison was also made by taking the temperatures of the steam in the valve chest of a simple consolidation, which averaged 24° below that corresponding to saturated steam at the boiler pressure, so that the superheater, which showed an average temperature in the steam chest of from 25° to 33° above that corresponding to the boiler pressure, may be assumed to have raised the temperature of the steam 50° to 60°. No comparison was attempted on these tests, but the Baldwin Locomotive Works conclude from the results obtained in a test of a balanced compound and simple engine in passenger service, and

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PRESIDENT.

from the results of the tests at St. Louis, that a locomotive of this type equipped with a superheater will give a saving of 15% in water consumption and 11% in fuel consumption over a similar simple expansion engine. An interesting comparison made during the test was the increase in tonnage that could be handled by the superheater in proportion to the simple engine, and the absence of water in the cylinders resulting in decreased trouble with the rod packing. No trouble was experienced in the lubrication of the balanced slide valves with the ordinary sight feed lubricator.

With the exception of the more extended application of the Vauclain superheater during the past year, evidently but little interest has been manifested in superheating, and yet the replies from those roads on which superheater engines have been in service do not condemn them. The Great Northern Ry., which has one passenger and one freight engine equipped with the Schmidt smoke-tube superheater, reports two coal tests between the superheater engines and simple engines of practically identical construction. In passenger service a test on the Kalispell Division showed a saving of 13% in water and 14½% in coal per car mile, while in freight service on the Willmar Division the saving was 30½% in water and 28½% in coal per ton mile, the coal figures being 137½ for the simple and 98 lbs. for the superheaters per 1,000 ton miles, both very satisfactory figures for Prairie type engines in freight service on an undulating road. They also report a comparison for nine months between a superheater freight engine and a similar simple engine, showing 137 lbs. of coal per 1,000 ton miles for the superheater against 171 for the simple, and a cost for repairs of 4c. per mile against 3.87c., a reduction in the coal consumption of 20%, with practically the same cost for repairs.

The Boston and Maine reports on one passenger engine equipped with the Cole superheater, that while the original arrangement gave them considerable trouble from leaking and from breakage of the superheater pipes near the header castings, when the engine was in good condition it has given excellent service, and they are taking steps to substitute improved details. They favor further improvement until better results are obtained rather than the abandonment of superheating.

The Chicago and North-Western Ry. reports with reference to one passenger engine with the original Cole superheater, which originally gave trouble from header joints leaking, that by the substitution of ground header joints this trouble has been overcome, and states that the results have been very satisfactory the last twelve months.

The New York Central reports on one passenger engine equipped with the Cole superheater, a slight reduction in the coal consumption, but no conclusion.

The Soo Line reports on one freight engine equipped with the original Cole superheater, that they have experienced no trouble except with leaks in the header connections, and while they cannot give accurate figures showing consumption of coal, there is evidently a saving, and the engine handles a train better than other engines.

The Lake Shore and Michigan Southern Ry. reports on two passenger engines, one equipped with the original Cole and the other with the Vaughan-Horsey superheater, that no further tests have been made. They have experienced difficulty in their operation as follows: 1. The lubrication. This was first attempted with the forced feed lubricator, and afterward the ordinary sight-feed lubricator was found to give entire satisfaction. 2. On the Vaughan-Horsey superheater the top header broke, due to faulty design, which has been overcome by changes in the cross section from square to round. 3. A number of the superheater tubes have cracked, but no remedy has been suggested. Their conclusion is that the superheater passenger engines have on the whole been satisfactory, and that while certain defects have developed, they are not of a nature that presents any serious difficulty. The engines have proved distinctly superior to simple engines of corresponding types both in economy in fuel and their capacity for handling their trains. They consider superheating a very promising improvement and intend to apply it to a considerably greater extent.

The C.P. Railway, which, as this report states, has a large number of superheater engines in service, is operated in two systems, the Lines East and West of Fort William respectively, and Grant Hall, Superintendent of Motive Power of the Lines West, has furnished a report from the master mechanics of the three divisions under his charge, having a total of 103 superheater engines at the commencement and 143 at the end of the year. As these statements cover a fairly extended experience with the original Cole, Schmidt and Vaughan-Horsey superheaters, extracts from them are quoted as follows:

"We experience trouble in keeping large superheater tubes free and clear from cinders; if this is not done the benefit of the superheater is lost. I find that the large tube fills up and becomes choked, starting from firebox end and extending about two feet in it if not kept after and cleaned out regularly; to do this we pull back the deposit with a rod with a bent end and then finish up by blowing through air. We also find that the small steam pipes get coated with soot, which also prevents us getting full benefit of the heat passing through the tube, which is only partly overcome by repeated blowing out with air.

"The Schmidt type is giving us very little trouble on this division, perhaps not so noticeable on account of only having one engine of this type. The main top header on this engine, however, has failed twice by cracking around the neck between the header and the flange which bolts to tube sheet. The jointing arrangement of small superheater pipes has not given us any trouble whatever from leaking or slackening back, which is frequent with other types.

"The Cole type is a constant trouble from leakage at joints where small headers bolt to main header and cannot be maintained tight for any length of time. In tightening them up, which is frequently done, the studs, which were enlarged from ¾ to ⅞ inch, are strained, broken and pulled out from main header. When leaking, the flat face on main header, as well as the grooved bed in the small headers, are cut by steam leaks, necessitating plugging, etc., making it very costly to maintain, not saying anything about holding engine out of service or extra fuel consumption.

"The Vaughan-Horsey type causes trouble by the union joints leaking, caused by nuts slackening off them where joined to main header, and have to be opened up as often as business will permit and gone over to avoid failures; this being the only trouble we have with this type outside of the returns burning out occasionally, which is equal on all types."

"I am in favor of superheated steam in both passenger and freight service, and consider that we get good results when the arrangement is working satisfactorily and free from leaks. The system should be improved on to lessen the maintenance work, and the question of lubrication most thoroughly gone into with a view of reducing the number of piston and valve rings that are being used. With the quality of the oil we are using we find it necessary to renew piston rings every four or five weeks and the valve rings every two months. When piston rings are removed, if not broken, they are worn down to about ⅜ inch thick. Have had very little difficulty with respect to superheater tubes stopping up, but it is absolutely necessary that the damper in smoke-box be kept in working order.

"With the Schmidt superheaters we experience considerable difficulty in keeping flange joints tight where bolted on header. Have had one header broken off close outside of flange where bolted on to round head. With the Vaughan-Horsey type we have quite a lot of trouble with the brass ring nut at connections, but using the mild steel nut, I think, will overcome this to a great extent.

"My experience with superheated steam in freight service is satisfactory; have no engines in passenger service equipped with superheated steam.

"In regard to the superheater tubes blocking up in the smoke tube class. We have had some difficulty in keeping the smoke tube clean, and the only way to get good results is to blow them out each trip with air; doing so we have been able to keep them in good condition.

"We have had considerable trouble with the piston and valve rings of the superheater type. This trouble has been eliminated to a large extent by making a more rigid examination of rings and feed attachments to valves and cylinders, also by making a perfect fit of new rings when applied to piston. Another important feature toward the maintenance is the superheater dampers and their attachments. To keep these in working condition it is necessary to inspect them thoroughly every week, which will prevent any trouble from defective dampers. The worst feature is the possibility of engine failures on account of superheater pipes bursting and leaking; they give no warning, and it is impossible to detect them before giving out.

"In connection with superheaters in freight service, the only difficulty was in the large tubes leaking badly, making it necessary to expand them every round trip. In passenger service I consider them very satisfactory, both in efficiency for this class of work and for the light maintenance of same."

Mr. Hall has also written a general statement of his experience from which the following are extracts: "We find that the superheater tubes plug up to a certain extent, but we overcome this by blowing out with air. The Cole type only has given us trouble maintaining header joints. In passing I might say, for your information, that the Cole superheater has given us so much trouble in this respect that I would not recommend its use. We have had very little trouble with the Schmidt type, the principal trouble being one that can be overcome, namely, the cracking of the superheater header through the neck. The only difficulty that has been experienced with the Vaughan-Horsey has been the slackening off of the nuts coupling up the superheater pipe to the header; this type of superheater is an easy proposition to maintain. In regard to lubrication. We have had nothing in the shape of forced feed that gave satisfaction, and have none now in service, being replaced entirely by sight-feed lubrication. It is not necessary that we have separate cylinder connections, but I do consider it necessary to have connection to each end of the valve bushing when using superheated steam. My experience with superheated steam in both passenger and freight service is satisfactory."

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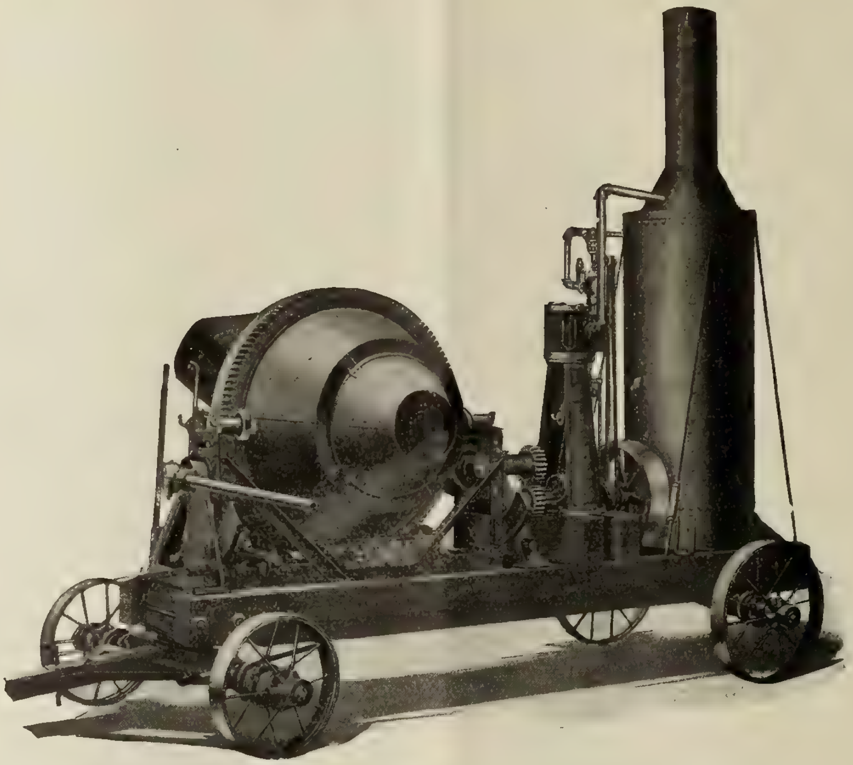

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On the Lines East of the C.P.R., for which the chairman of the committee is reporting, practically the only superheater in use is the Vaughan-Horsey, as those with the Schmidt are on Lines West and most of the original Cole have been converted. The important question during the past year has not been one of economy but of maintenance, not with respect to cost, for in that respect the addition of a superheater is not noticeable, but with respect to reliability. Engine failures are annoying and expensive, and no device can be a permanent success which introduces them to any extent. The important troubles that have developed during the last year have been three in number: 1. Leakage at the union connections between the superheater pipes and the header due to nuts slackening off. 2. Bursting and splitting of superheater pipes. 3. Breakage of superheater header.

Leakage at the union connections was at first caused by brass nuts having been used, and with the change to steel nuts it appeared to have ceased. Considerable trouble has, however, been experienced with the steel nuts, although not universally, as on some divisions it is practically nil, but in many cases the nut has slacked off entirely, causing a complete and annoying failure. The reasons appear to be poor workmanship and insufficient strength of the nuts. With stronger nuts and proper workmanship, both of which can be arranged for, this trouble should be overcome, but it has been decided to apply lock nuts, of which several designs are now on trial, which will without a doubt overcome the difficulty; and while a monthly inspection is required, failures from this cause will be avoided.

Bursting and splitting of superheater pipes, while not frequent, can be avoided only by proper maintenance of the dampers. This defect does not occur frequently, and is no doubt partly due to insufficient care having been taken in putting up the pipes to the correct lengths.

Breaking of superheater headers, while not frequent, has occurred several times, but can be stated definitely to be a defect in design. Only top headers have broken and these all in practically the same place, at the junction of the steam-pipe flange with the header. By changing the form and insuring a stronger metal, there is little doubt of this trouble being overcome.

The number of failures from the above causes have not on the whole been excessive. From April 1, 1907, to Jan. 31, 1908, 39 superheater engines in passenger service made a total of 1,382,820 miles, with a total of 15 failures. Of these 9 were due to joints leaking, 4 to pipes bursting and 2 to headers breaking. The number of miles per engine failure was therefore 92,188, and as 11 of these failures are from causes that can be overcome, it is evident that when this is done the unavoidable failures are not a serious drawback. Figures are not available giving the failures in freight service with any degree of accuracy, as if the records were taken as they stand they would show so small a number of failures that their unreliability would be evident, but those in passenger service are reasonably correct.

So far as the cost of repairs is concerned the addition of a superheater does not appear to be noticeable. The superheater itself certainly costs something to maintain, as does the necessary inspection of its parts, but the net result is, so far as the records on the C.P.R. are concerned, in favor of the superheater as against any other class of engines, and there is no evidence whatever of increased cost.

While discussing the difficulties introduced by the application of superheaters there are certain advantages which to a large extent offset them. Where simple engines have been converted, they have shown an increase in capacity that may be roughly estimated at about 10%. They run more freely, and are decidedly easier on their fire, allowing an inferior grade of coal to be burned with less difficulty, to an extent which caused a superheater passenger engine to handle trains without loss of time when similar simple engine failed to do so. There is also a notable absence in superheaters of the trouble caused by water, and on the whole, providing the difficulties mentioned are overcome, it is a close question whether superheater engines will not average less failures than a corresponding number of simple engines, and they will certainly handle heavier trains and make time. Where coal is expensive and the question is one of the adoption of a compound or a superheater, there is no doubt that the latter will give greater economy, with a smaller cost for repairs and less trouble.

The results in fuel consumption appear to confirm the statements made in the last report, namely, 10 to 15% in freight service and 15 to 20% in passenger service. It does not appear necessary to present these figures in detail, as this has been done in previous years, but the results for July to Dec., inclusive, have been gone over by sections and months, those cases being selected in which sufficient work was performed by the two classes of engines being compared to render the results reasonably reliable. The equivalent coal is the coal which the class of engine shown would have burned had its consumption per ton mile been equal to that of the class taken as the basis of comparison, while its relative consumption is the proportion of the actual to the equivalent coal. As these quantities are calculated month by month and the traffic and weather conditions thus equalized, this method is comparatively accurate.

The comparison of simple consolidation engines class M-4b with similar Vaughan-Horsey superheaters is shown in table 1, from which the average consumption of the simple engines works out at 113½% of that of the superheaters.

The consumption of compound ten-wheel freight engines D-9 and Cole superheaters, D-10c with Vaughan-Horsey superheaters, is shown in table 2, from which the average consumption of the compound engines works out at 100% and that of the Cole superheater at 107% of that of the Vaughan-Horsey superheater.

Table 3 shows the comparison of Pacific type superheater engines, class G-2, and of 10-wheel superheater, E-5g, with 10-wheel simple engines, class E-5. The 10-wheel superheaters are engines converted from simples and are otherwise similar. From this table the saving in fuel on the converted engine works out at 21% and that of the Pacific type at 22½% on Lines East, but this figure is subject to the larger engine doing more work for the same weight of train or handling heavier trains, although only certain sections have been included where this variation is a minimum. The results on the Brandon and Swift Current sections are remarkable in view of the large amount of coal burned, and show, with a total of 5,250 tons, a saving of about 35%.

TABLE 1.

Section.	Class.	Coal.		Relative Consum'tn. Per Cent.
		Actual.	Equivalent.	
Farnham.....	M-4b	2,999	2,683	112
Newport.....	"	1,121	885	127
Havelock.....	"	86	80	107½
Toronto......	"	2,385	2,162	108
London......	"	618	546	113
North Bay...	"	1,204	1,052	114
All..........	"	8,413	7,408	113½

TABLE 2.

Ignace.......	D-9	885	862	103
Kenora......	"	781	781	100
Brandon.....	"	1,079	1,110	97½
All..........	"	2,745	2,753	100
Ignace.......	D-10c	2,030	1,920	106
Kenora......	"	9,012	8,288	109
Winnipeg....	"	15,498	15,537	99½
All..........	"	27,540	25,745	107

TABLE 3.

North Bay...	G-2	246	177	72
Chapleau.....	"	364	270	74
White River..	"	363	308	83
All..........	"	973	755	77½
Brandon.....	"	2,753	4,169	66
Swift Current.	"	2,496	3,890	64
North Bay...	E-5g	555	704	79
Smith's Falls.	"	990	1,281	77

The replies show that the question of lubrication appears to have been settled by all roads resorting to the sight-feed lubricator.

Two roads report satisfactory results with a single central connection to the valve chest as on ordinary simple engines, but the majority are using the separate cylinder connection with either one central or two separate connections to the valve chest.

On the C.P.R. some engines are running with one central connection to the valve chest and no cylinder connection, but the preferred arrangement is the separate connection to the cylinders with one feed to the valve chest split to feed to both ends. The cylinder connection feed is generally cut down to a very small amount when running, and most of the oil fed through the valves, but the majority of the men prefer to have it in case it is required.

After reading the report Mr. Vaughan stated that he wished to modify the figures in table 3, in which the G-2 engine superheaters are shown to have burned 66 and 64% of the coal used by simple engines. It had been found that the simple engines were as a rule used on lighter and faster trains than the superheaters and a good deal of the saving was possibly due to that fact. This does not affect the rest of the table. He also stated that eight or nine months ago he was a little in doubt on the superheater question, as there had been a number of failures. During the last six months this had been overcome by systematic attention in the roundhouse and by periodic tests of the superheaters, and since the end of March there had not been a single superheater failure out of 200 engines thus equipped.

J. E. Muhlfeld suggested that the committee be continued to investigate the degree of superheat which would give the most economical results, and also as to whether it is advisable to use the products of combustion, or the waste gases, or a combination of the two, to produce superheat. In reply to this Mr. Vaughan called attention to the paper presented at the 1905 convention, in which proof was submitted that a high degree of superheat was desirable and that, although useless heat was rejected, it was more economical to reject that heat than to be without it.

Mr. Vauclain said that he had always felt that highly superheated steam was not what was wanted in this country, it being only desirable to have sufficient superheat to overcome all the loss of the single expansion locomotive and at the same time to make it possible to use a normal boiler pressure of 160 lbs. This would overcome the need for a compound locomotive or for any special appliances or special metal in connection with the use of highly superheated steam. It would also make it possible to produce a locomotive which would require even less attention than a single expansion locomotive. He called special attention to the service results which had been gained by engines with a low degree of superheat on the Santa Fe. Mr. Vauclain made it very plain, both at this time and in connection with the discussion of

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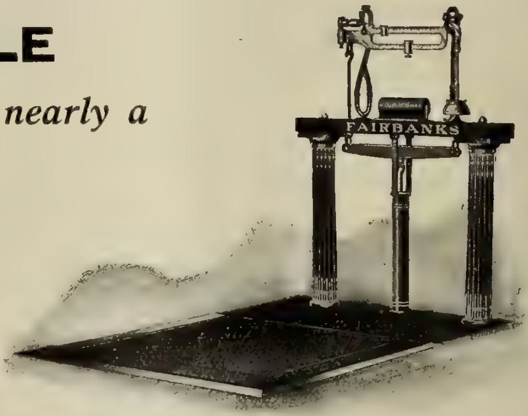
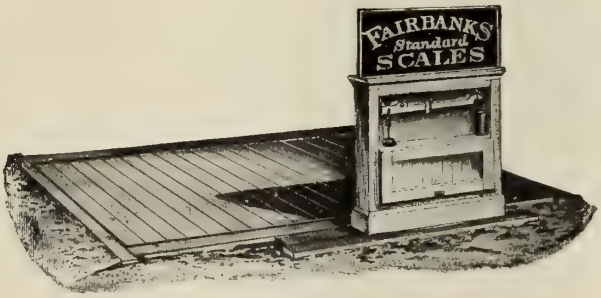


WAREHOUSE SCALE



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other reports, that he considered a simple engine equipped with a superheater, which would give a low degree of superheat, as the coming engine. Mr. Foster (L. S. & M. S.) spoke of the satisfactory service results which were being obtained from two superheater engines on the L. S. & M. S. The committee was continued and asked to report on the degree of superheat which will give the most economical results.

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August Birthdays.

Many happy returns of the day to—

W. E Bishop, Manager Hamilton Steamboat Co., Hamilton, Ont., born at Brantford, Ont., Aug. 10, 1868.

J. F. Chapman, General Freight and Passenger Agent, Bay of Quinte Ry., Thousand Islands Ry., Oshawa Ry., and Deseronto Navigation Co., Deseronto, Ont., born at Frankford, Hastings Co., Ont., Aug. 25, 1863.

Barlow Cumberland, Vice-President Niagara Navigation Co., born at Portsmouth, Eng., Aug. 5, 1846.

G. H. Ham, head office staff C.P.R., Montreal, born at Trenton, Ont., Aug. 23, 1847.

W. P. Hinton, Assistant General Passenger and Ticket Agent G.T.R., Montreal, born at Hintonburg, Ont., Aug. 30, 1871.

R. Kerr, Passenger Traffic Manager C.P.R., Montreal, born at Toronto, Aug., 1845.

J. D. McDonald, District Passenger Agent G.T.R., Toronto, born there Aug. 27, 1855.

T. McHattie, Master Mechanic, G.T.R., Montreal, born Dufftown, Banffshire, Scotland, Aug. 8, 1854.

C. Montgomery, Assistant Master Mechanic Pere Marquette Rd., St. Thomas, Ont., born near London, Ont., Aug. 29, 1860.

W. E. Mullins, General Manager Costa Rica Rd., and Northern Rd. of Costa Rica, San Jose, born at Stratford, Ont., Aug. 13, 1870.

W.S. Nevins, District Freight Agent C.P.R., and Minneapolis, St. Paul and Sault Ste. Marie Ry., Buffalo, N.Y., born at Towanda, Pa., Aug. 13, 1850.

W. M. Porteous, Freight Agent C.P.R., St. Louis, Mo., born at Edinburgh, Scotland, Aug. 3, 1857.

J. F. Richardson, Superintendent Eastern Division C.P.R. Telegraphs, Montreal, born at Granby, Que., Aug. 23, 1861.

W. LeB. Ross, Local Treasurer G. T. Pacific Ry., Winnipeg, born at Ottawa, Ont., Aug. 9, 1868.

C. R. Scoles, General Manager Atlantic and Lake Superior Ry., New Carlisle, Que., born at Grantham, Lincoln, Eng., Aug. 27, 1856.

W. Stitt, General Passenger Agent C.P.R. Eastern Lines, Montreal, born in Kirkcudbrightshire, Scotland, Aug. 3, 1855.

W. F. Taylor, General Storekeeper I.C.R., Moncton, N.B., born at Hillsboro, N.B., Aug. 20, 1855.

W. N. Warburton, ex-General Manager Windsor, Essex and Lake Shore Rapid Ry., born at Chatham, Ont., Aug. 24, 1851.

W. B. Way, Assistant Superintendent C.P.R., White River, Ont., born at Bowmanville, Ont., Aug. 22, 1867.

W. H. H. Willis, District Freight Solicitor Pennsylvania Rd., Pittsburgh, Pa., born at St. Michaels, Maryland, Aug. 22, 1872.

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The G.T.R. was fined $100 in Toronto police court, recently, for cruelty to animals, a carload of cattle having been kept 40 hours without food and water, while in transit from Wiarton to Toronto.

The following are the officers of the Eastern Canadian Passenger Association for the current year: Chairman, F. E. Barbour; Executive Committee, W. Stitt, G. T. Bell, G. Tombs; Secretary, G. H. Webster, Montreal.

G.T.R. Betterments, Construction, Etc.

A recent statement, officially made, shows that within the last few years the company has expended $15,000,000 in constructing a second track between Montreal and Chicago; has laid down 80-lb. steel rails where formerly there were 65 and 72-lb. rails, and is now replacing a good deal of the 80-lb. rails with 100-lb. ones. Every new bridge put in is made to carry the heaviest loads. All over the system new shops, roundhouses, stations and other buildings are being constructed, and additional yard facilities are being provided.

Montreal Track Elevation.—Plans are being prepared by S. Howard, Deputy Chief Engineer to the Montreal City Council, on the instructions of the Level Crossing Committee, for the abolition of the G.T.R. level crossings in the city. The proposal of the city is that the passenger tracks shall be elevated from Bonaventure station to Victoria Bridge. The freight tracks to remain on the level west as far as Mountain St., whence they will proceed on an incline to Guy St., where they will attain the elevation of the passenger tracks, but the traffic will be limited to certain hours. Mr. Howard is working in connection with G.T.R. engineers.

Ottawa Terminals.—The Ottawa City Council, on June 25, finally approved of the agreement with the G.T.R. respecting the erection of a union station and an hotel in that city, the fair wage clause, which was the source of difference, being struck out. The agreement was signed by C. M. Hays, Second Vice-President and General Manager, June 29, and was subsequently executed by the Mayor. The Dominion Parliament, July 6, passed the bill authorizing the sale of a portion of Major's Hill Park to the G.T.R., as a site for the hotel, upon terms agreed upon. The bill provides that the G.T.R. may transfer the land to the Ottawa Terminal Ry. Co., which is the title of the company incorporated by Parliament to own the union terminals. W. Wainwright, Fourth Vice-President G.T.R., stated in Ottawa, July 10, that the working plans and drawings for the new station and hotel would be completed in a few weeks, when tenders would be asked for the work. It was the intention of the company to go ahead simultaneously with both buildings. The preliminary excavation and concrete work is being gone on with.

Toronto Belt Line.—E. H. Fitzhugh, Third Vice-President, stated, July 5, that the reports of the purchase by the company of a piece of land in North Toronto, in connection with a proposal to reconstruct and operate the old Belt Line Ry., were altogether unfounded.

Stratford Improvements.—The excavations for the foundation of the power house at the new shops have been completed and the concrete work is being gone on with.

London Improvements.—The fact that certain tenants of the G.T.R. in London, Ont., have received notice to vacate their premises, has restarted all the talk about the carrying out of extensive improvements in the city. Engineers made an examination of the Egerton St. crossing July 2, and C. M. Hays, Second Vice-President and General Manager, is reported to have been in correspondence with the Mayor upon some of the matters connected with the improvements.

Stations Burned.—The G.T.R. has had three of its stations burned recently, the fires in Ontario being caused by lightning. Berlin station was destroyed June 22, with about $15,000 damage; Walkerton station was destroyed the same night; and Ionia, Mich., station was destroyed on June 29, the damage being about $15,000.

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309,900	116,100+
Nov..	957,400	689,100	268,300	215,700+
Dec..	801,100	558,400	242,700	264,900+
Jan...	578,200	462,500	115,700	226,800+
Feb..	485,600	401,900	83,700	152,400+
Mar.	625,300	453,400	171,900	136,500+
April	686,100	525,400	160,700	116.200+
May.	654,900	523,100	131,800	215,700−
	$8,338,000	$6,065,800	$2,272,200	$1,808,000+

Mileage operated, 2,874 against 2,554 in June, 1907.

Approximate earnings for June, $674,400, against $963,100 for June, 1907.

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C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7,010,177.40	4,439,902.25	2.570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
Dec.	6,418,576.38	4,341,386.80	2,077,189.58	188,404.76−
Jan..	4,498,560.80	3,874,569.02	623,991.78	75,664.17+
Feb..	4,129,044.09	3,771,947.48	357,096.61	264,891.51−
Mar.	5,424,931.26	4,123,901.77	1,301,029.49	944,706.73−
April	5,497,736.30	3,775,501.86	1,722,234.44	644,691.43−
May.	5,392,570.16	3,711,074.92	1,681,495.24	827,862.77−
	$65,828,338.68	$45,711,468.53	$20,116,870.15	$2,771,332.38−

Approximate earnings for June, $5,458,000, against $6,740,000 for June, 1907.

Duluth, South Shore and Atlantic Ry.—Gross revenue for May, $194,262.77; expenses, $157,630.62; net revenue, $36,632.15; against, $311,078.17, gross revenue; $197,474.09, expenses; $113,604.08, net revenue for May, 1907. Gross revenue for eleven months ended May 31, $2,805,610.07; expenses, $2,042,308.32; net revenue, $763,301.75; against, $2,981,821.55, gross revenue; $2,000,260.52, expenses; $981,561.03, net revenue for same period, 1906-07. Approximate earnings for June, $206,763, against $308,835 for June, 1907.

Mineral Range Rd.—Gross revenue for May, $65,786.44; expenses, $59,680.11; net revenue, $6,106.33; against, $74,638.27, gross revenue; $50,853.78, expenses; $23,784.49, net revenue for May, 1907. Gross revenue for eleven months ended May 31, $740,258.31; expenses, $629,281.14; net revenue, $110,977.17; against, $720,346.99, gross revenue; $536,326.40, expenses; $184,020.59, net revenue for same period, 1906-07. Approximate earnings for June, $68,786, against $66,152 for June, 1907.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Gross earnings for May, $736,755.97; expenses, $547,828.69; net earnings, $188,927.28; against, $1,285,838.64, gross earnings; $722,451.32, expenses; $563,387.32, net earnings for May, 1907. Gross earnings for eleven months ended May 31, $10,589,104.49; expenses, $6,572,274.56; net earnings, $4,016,829.93; against, $11,732,288.69, gross earnings; $6,714,533.14, expenses; $5,017,755.55, net earnings for same period, 1906-07. Approximate earnings for June, $829,224, against $1,137,348, for June, 1907.

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Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G.T.R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for May, as compared with May, 1907:

GRAND TRUNK RAILWAY.	1908	1907
Earnings	$2,515,000	$3,160,880
Expenses	1,601,000	1,986,130
Net earnings	$ 914,000	$1,174,750
CANADA ATLANTIC RAILWAY.		
Earnings	$ 151,300	$ 158,600
Expenses	156,000	173,900
Def.	$ 4,700	Def.$ 15,300
GRAND TRUNK WESTERN RAILWAY.		
Earnings	$ 363,100	$ 478,600
Expenses	370,400	413,900
Def.	$ 7,300	$ 64,700
DETROIT, GRAND HAVEN & MILWAUKEE RY.		
Earnings	$ 109,600	$ 110,500
Expenses	119,300	109,200
Def.	$ 9,700	$ 1,300

Approximate earnings for June, $3,462,514, against $3,828,780 for June, 1907.

TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from Jan. 1 to June 30:

	1908.	1907.	Increase.	Decrease.
Grand Trunk	£2,858,900	£3,390,817	....	£531,917
Canada Atlantic	156,818	173,957	....	17,139
G. T. Western	513,069	594,462	....	81,393
D. G. H. & M.	138,211	163,922	....	25,711
Total	£3,666,998	£4,323,158		£656,160

Mileage operated in 1908, 4,523 same as in 1907.

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WE RESPECTFULLY INVITE YOUR INQUIRIES AND CORRESPONDENCE.

Canadian Northern Ry. Construction.

Canadian Northern Ontario Ry.—The official opening of the northern section of the company's line from Toronto to Sudbury, consisting of the portion from Parry Sound north, took place July 3, when D. B. Hanna, Third Vice-President, accompanied by some other officials; the officers and council of the Toronto Board of Trade, and press representatives went over it by special train. The line has been in operation between Toronto and Parry Sound for nearly two years, and by the opening up of the present extension the C.N.O.R. mileage is increased to 306.1 miles. The line not only opens up a new route through the Muskoka country, but it serves the Moose Mountain district, where large iron ore mines are being developed, and has created a new port on the Georgian Bay at Key Inlet. The company is completing a line from Hawkesbury into Ottawa, which will connect its C.N. Quebec Ry. with the capital, and surveys have been completed for lines between Toronto and Ottawa, and Ottawa and Key Inlet, which will practically complete the Quebec and Ontario lines. The question of the construction of a line between Sudbury and the Canadian Northern Ry. at Port Arthur, a distance of about 550 miles, will probably not be definitely undertaken until the connection between the Toronto-Sudbury line and the Hawkesbury-Ottawa line has been completed.

Work was commenced on the line between Toronto and Parry Sound in Sept., 1904, and the 149.2 miles between these points was opened Nov. 19, 1906. While this work was going on, two grading outfits were at work between Parry Sound and Sudbury, the French River being the dividing line. One division was handled from Parry Sound north, and the other from Sudbury south. In addition to the above mileage, there was constructed during the same time a branch to the Hutton mine of 27.6 miles; another to the Garson mine, 3.8 miles; and a branch to Key Harbor, 6.7 miles; a total of 306.1 miles. This represents a little over a quarter of a mile of completed track for every working day since the work was started. The roadbed is well constructed, the gradients are light, and the alignment the best the country would allow within the company's standard, and the track is laid throughout with 80-lb. rails. Between Parry Sound and Sudbury, and on the branches, there were many difficulties to overcome between the time the engineers located the line and July 3, when the completed roadbed was handed over to the operating department. Before the grading could be done 2,111 acres had to be cleared along the right-of-way. In grading the roadbed there was excavated 2,448,189 cubic yards, of which 1,035,781 were solid rock, 504,622 classified material and 907,786 earth. As it was next to impossible to get material to bring the banks up to the grade line after track had been laid, 700,000 cubic yards had to be moved by train. This train filling is properly a part of the grading and had to be done to bring the track up to sub-grade level, so that the grading really amounts to 3,148,189 cubic yards. On top of this were placed 468,801 cubic yards of ballast, equal to 3,000 cubic yards per mile of ballast for the entire line. This large amount of ballast on the solid roadbed is accountable for the comfortable ride the party above referred to had over the line and which was so favorably commented upon by all of them.

In the construction of the wooden trestle bridges and culverts, there was used 144,404 lineal ft. of piling, 903,568 ft. b.m. cedar, 8,803,172 ft. b.m. hard pine and 458,888 ft. b.m. of hemlock.

The steel bridges, 18 in number, ranging from a 35 ft. plate girder to the 300 ft. through truss, are all placed on concrete foundations. These foundations contain 4,650 cubic yards of concrete. The total length of the steel spans is 1,997 ft., and the weight 1,791 tons. Some of the larger bridges are on the crossings of the following rivers from Parry Sound north: Seguin, three deck plate girders each 75 ft. long, flanked on either end by a 35 ft. deck plate girder, total length 290 ft. South Maganetawan, a deck plate girder 102 ft. long. Still River viaduct consisting of 2 girders 60 ft., 1 girder 80 ft. and 2 girders 40 ft., each placed on steel towers, a total length of 280 ft., and the rail is 98 ft. above water. Pickerel, through truss 300 ft. long, height of truss 52 ft. Rail 54 ft above water; depth of water at crossing 40 to 50 ft. This was one of the most difficult pieces of construction work on the line. The French River at the crossing is divided into two channels and is crossed by 3 girders, 1 span lattice deck truss 128 ft., and two deck plate girders 110 ft. each; total length of crossing 348 ft.; rail 50 ft. above water. Wanapitei, one deck plate girder 100 ft long, 45 ft. above water. Besides the bridges mentioned there are four crossings of the Key River, and five crossings of the Vermillion. The construction of the line was in charge of W. D. Grant, Manager of Construction for Mackenzie, Mann & Co., Angus Sinclair being the principal contractor.

The new line opens up a territory full of fish and game that will gladden the heart of the sportsman, and scenery as beautiful as any part of Muskoka. As soon as the Key Harbor docks are completed and ore shipments commence from the Hutton mines, the part of the line between the Hutton mine and Key Harbor is expected to be known as the greatest ore shipping piece of track in Canada. If also, later on, the smelter proposition becomes an accomplished fact in Toronto, the tonnage of ore then handled should make the line stand alone as the longest piece of track hauling large bodies of the raw product.

The opening trip above mentioned was broken at Parry Sound, where the party were entertained at luncheon and at Sudbury in the evening they were entertained at dinner, the Mayor presiding, and D. B. Hanna and others speaking.

On the following day the party went out on the Moose Mountain branch to visit the iron mines. The company's property there consists of 4,700 acres, and the vein being worked is about 150 ft. wide and has a length of 500 ft., the ore running from 58 to 60% of metallic iron. The mining and crushing plant at Moose Mountain has been erected at a cost of $150,000, and now that the railway is open, a start will be made in shipping ore. The party subsequently visited the docks at Key Harbor, where loading trestles capable of handling 8,000 tons of ore a day, and other appliances, have been erected. The special train returned to Toronto early on the morning of July 5.

It is reported that construction will be started at once upon the projected branch line from Udney, on the Toronto-Sudbury line to Orillia, Ont., but we are advised that no definite decision has yet been arrived at.

Canadian Northern Ry.—The ballasting on the line into Regina, Sask., is about completed, and it is expected that a regular passenger service train will be started Aug. 1. The service will, it is stated, run through from Winnipeg to Prince Albert, via Brandon, to Regina, and thence over the old Qu'Appelle, Long Lake and Saskatchewan line.

Grading is reported to be practically completed on the branch running northerly from near Dalmeny to Carlton, Sask., and the grading outfit has been moved to Prince Albert, to go on with the line to connect that place with Battleford. Local reports state that 30 miles of the line are to be completed this year, and that it is proposed to extend it through to Calgary, Alta.

Steel and ties are being collected in the vicinity of Regina, for starting tracklaying on the Goose Lake branch, as soon as the grading is sufficiently forward.

A sale of town lots at The Pas, Sask., took place June 20, when some 365 lots were sold. There are over a dozen buildings in the settlement, which is the present terminus of the company's line reaching out to Hudson Bay. (July, pg. 469.)

Master Car Builders' Association.

The 42nd annual convention of the Master Car Builders' Association was held at Atlantic City, N.J., June 17, and following days. The Secretary's report showed a total membership of 726, including 424 active, 275 representative, 13 associate and 14 life members. The number of cars represented in the Association was 2,283,330, an increase of 28,933 for the year. During the year 29 railways and private car lines had signified their desire to become subscribers to the rules governing the interchange of freight cars, and five railways had also advised their acceptance of the code of rules governing the interchange of passenger equipment. The dues for the year 1909 were fixed at $4 per vote.

E. A. Moseley, Secretary of the Interstate Commerce Commission, delivered an address in which he drew attention to a number of matters of importance. He referred to the legislation now before Congress, which aimed to make the M.C.B. Association's standards for the protection of trainmen the law of the land. The general condition of equipment throughout the country now showed such marked improvement that he believed the time was near when safety appliances would be kept in the best possible condition and the necessity for prosecutions cease. During the preceding year, 2,260 cases of violation of the safety appliance law were taken to the courts.

The reports of the Committees on Revision of Standards and Recommended Practice, Triple Test Valves, Brake Shoe Tests, Tests of M.C.B. Couplers, Arbitration, Cast Iron Wheels, Journal Box and Pedestal for Passenger Cars with 5 x 9 in. and 5½ by 10 in. Journals, Marking of Freight Equipment Cars, Air Brake Hose Specifications, Automatic Converters, Lateral Bracing of Steel Freight Cars, Side Bearings and Centre Plates for Freight and Passenger Cars, Steel Passenger Cars, Heating and Ventilating Passenger Cars, Protective Coatings for Steel Cars, Location of Ends of Running Boards, Standards for Protection of Trainmen, Box Car Doors and Fixtures, Tank Cars, were received, considered and acted upon.

Owing to the number of committee reports the topical discussions were not reached, and it was decided that members should submit what they had to say upon them in writing, for inclusion in the printed proceedings of the convention.

Following are the officers for the current year: President, R. F. McKenna, Delaware, Lackawanna and Western Rd.; First Vice-President, F. H. Clark, Chicago, Burlington and Quincy Rd.; Second Vice-President, T. H. Curtis, Louisville and Nashville Rd.; Third Vice-President, LeG. Parish, Lake Shore and Michigan Southern Rd.: Executive Committee: J. E. Muhlfeld, Baltimore and Ohio Rd.; C. E. Fuller, Union Pacific Rd.; H. D Taylor, Philadelphia and Reading Ry.; J. F. Walsh, Chesapeake and Ohio Ry.; C. A. Schroyer, Chicago and Northwestern Rd.

* * *

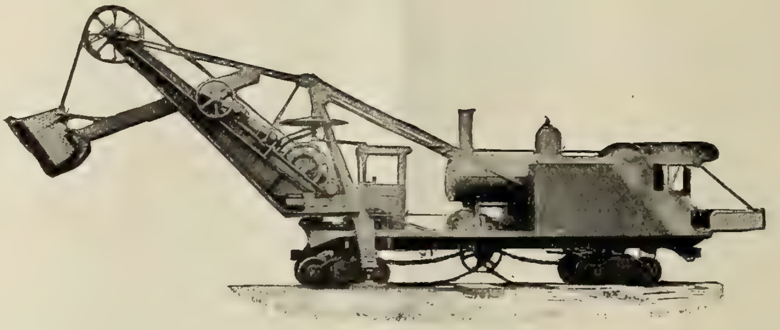
The G.T.R. Passenger Department has issued handsomely got-up brochures, descriptive of trains 3 and 4, and of Montreal and Quebec. They are even "one better" than the folders and booklets heretofore issued by the company.

STEAM **ELECTRIC**

LOCOMOTIVES

Ten-wheel Type Passenger Locomotive, built for Toronto, Hamilton & Buffalo Railway. Total weight of engine, 183,240 pounds. Weight on driving wheels, 139,675 pounds; diameter of driving wheels, 73 inches. Boiler pressure, 200 pounds. Size of cylinders, 20 x 26 inches. Maximum tractive power, 24,200 pounds.

STEAM SHOVELS



Great weight in a steam shovel makes it cumbersome and difficult to hold up on temporary rails and soft ground. The Atlantic Steam Shovel is of moderate weight, simple in design, and has few and strong parts that will not break or get out of order.

MONTREAL LOCOMOTIVE WORKS, LTD.

BANK OF OTTAWA BUILDING, MONTREAL, CANADA.

RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

The Alaska Central Rd., for which a receiver has been appointed, has been completed for 53 miles from Seward, on the Alaska coast, inland, and the grading has been completed ready for tracklaying for 14 miles further. A considerable amount of grading has been done up to mileage 105, while location surveys have been completed to mileage 225 and preliminary surveys to mileage 420. The line is projected to Fairbanks, 500 miles from Seward. No tracklaying has been done this season, and it was not proposed to do anything further in that way until a spur line to the mines at Copper River had been completed. The railway has not been operated except for construction purposes. (April, pg. 243.)

Alberta and British Columbia Ry.—An act was passed by the Dominion Parliament at its recent session incorporating a company with this title, with power to construct and operate a railway from the International boundary at or near where the Kootenay River crosses, northerly following the valley of that river to near Elko, B.C., thence northeasterly, following the valley of the North Kootenay River and the south fork of the Old Man River to at or near Cowley, Alta.; thence northerly, following the valley of the Old Man River through the gap in the Livingstone Range; thence following the valley of the north-west branch of the Livingstone River and along the Highwood River, easterly and northeasterly to or near Calgary, on the C.P.R. The capital stock is fixed at $1,000,000, and it may issue bonds to the extent of $40,000 a mile of railway constructed. It is also empowered to enter into agreements with the C.P.R., the Calgary and Edmonton Ry., and the G.T. Pacific Ry. The company's offices are at Port Arthur, Ont., and the provisional directors are: J. J. O'Connor, J. A. Little, J. A. Crozier, J. J. Carrack, and W. S. Ruttan, of Port Arthur. In passing through Parliament the name of the company was changed from Alberta Southwestern Ry. to the Alberta and British Columbia Ry. (June, pg. 401.)

Alberta Ry. and Irrigation Co.—We are advised that the branch line which the company has been authorized to construct is a spur of less than three miles to a new coal mine which it is sinking. The location as surveyed and approved by the Board of Railway Commissioners, leaves the company's existing main line in sec. 6, tp. 9, r. 21 west of the 4th principal meridian, and runs northerly to section 19, tp. 9, r. 21 west of the 4th meridian, a total distance of about 2.5 miles. (Aug., 1906, pg. 449.)

Algoma Central and Hudson Bay Ry.—It is reported at Sault Ste. Marie, Ont., that this railway will shortly pass under C.P.R. control, and that its extension to a junction with the existing branch, and to a junction with the C.P.R. transcontinental line will be undertaken at an early date. Sir Thos. G. Shaughnessy stated, July 18, that he knew nothing whatever of this report.

Eastern British Columbia Ry.—Press reports state that some preliminary construction has been done on this projected line, and that tenders have been asked for the grading and other work. There are some pieces of very heavy work upon the section of 14 miles which it is proposed to construct this year. (July, pg. 471.)

Intercolonial Ry.—Replying to a question in the House of Commons June 26, the Minister of Railways said the length of the extension from North Sydney to Sydney Mines, N.S. was 2.7 miles; the total cost to date had been $136,479.02; the right-of-way cost $24,442.69, and the amount paid for land damages was $4,238. There were some claims outstanding amounting to $7,015, and these were in course of settlement.

During the discussion of the estimates for the Intercolonial Ry. in the House Commons, July 7, the Minister of Railways said the total amount expended on increased accommodation at Halifax to the end of March was $2,233,000, and it was estimated that $500,000 would complete the works there. The plans for the new station at Truro, N.S., were under consideration, but he did not know whether it would be possible for construction to be started there this season or not. Surveys had been made for the construction of a second track between St. John and Hampton, N.B. Up to March 30, 1907, there had been expended in connection with the I.C.R. at St. John, the sum of $2,582,616. (July, pg. 471.)

International Ry. of New Brunswick.—In an interview at Montreal, July 8, T. Malcolm, the contractor for the construction of this railway, said he expected that the grading on this line, which is projected to connect the Intercolonial Ry. at Campbellton, N.B., with the St. John River near St. Leonards, would be completed this fall. There were, he said, 1,500 men and 300 teams at work. About 65 miles of the grading had been completed, 50 miles having been done from the Campbellton end. Work is going on from both ends. Track has been laid to the crossing of the Upsalquitch River. (July, pg. 471.)

London and Port Stanley Ry.—The Pere Marquette Rd. Co., lessee of the L. and P.S. Ry., has completed the erection of the new bridge at Port Stanley, Ont. This is the third of the new bridges which the P.M.R. asked the London city council, owning the line, to construct in order to accommodate the heavier traffic now going over the line. The other two bridges over the Thames were constructed in 1907. The city council refused to pay for the bridges, and it is expected that the company will enter suit to recover the amount expended. (See Pere Marquette Rd., Jan., pg. 21.)

Meadow Creek Logging Ry.—Application will be made next session of the British Columbia Legislature for an act incorporating a company with this title, with power to construct railway lines in the East Kootenay district, such lines to be operated either by steam or electricity, and to be equipped for the purpose of carrying freight, passengers and express. The routes particularly mentioned are: Commencing between mileposts 40 and 41 on the B.C. Southern Ry. near Yahk, and running southeasterly to Meadow Creek, and following the creek easterly and southerly to the International boundary, a distance of about 10 miles; also from the B.C. Southern Ry. about 2½ miles west of Cranbrook southwesterly through lots 5,249, 2310, 5801, 2311 and 6,315 to the southwesterly end of Smith's Lake, thence northwesterly to Parry Creek, a distance of about eight miles. Authority will also be asked to construct branch lines from either of these lines not exceeding in any one case five miles in length; to make connection with the C.P.R. or any other railway operating in the district, and to make agreements for running rights with the C.P.R. Harvey, McCarter and Macdonald, Cranbrook, B.C., are solicitors for applicants.

Murray City to New Liskeard, Ont.—A New Liskeard, Ont., press report says there has been received at New Liskeard, Ont., a consignment of steel rails for the proposed electric railway from Murray City to New Liskeard, and that the Quinze and Blanche River Ry. and the New Liskeard Electric Ry. have men at work grading at the foot of the first chute of the Quinze River.

This report evidently refers to the work in progress on the Quinze and Blanche River Ry., a steam railway, which, however, is authorized to develop water powers and distribute electric energy subject to the laws of Ontario and Quebec. (See Quinze and Blanche River Ry., July, pg. 473.)

New Brunswick Coal and Ry. Co.—A spur track is being constructed from Belleisle station to some gravel pits owned by the company. When this spur is completed the work of reballasting the line will be commenced. The repairs to the line which the Commissioners have undertaken are in a forward condition, and it is expected they will be practically completed by the time ballast can be hauled out over the new spur. (July, pg. 471.)

Orford Mountain Ry.—Press reports state that construction will shortly be started on an extension from near Bolton Line to near North Troy, on the Quebec-Vermont border, where a junction will be effected with the C.P.R. (May, pg. 333.)

Ottawa, Brockville and St. Lawrence Ry.—Replying to a deputation asking the Government to grant a subsidy towards the construction of this projected railway from Ottawa to Brockville, Ont., the Minister of Railways said if a subsidy were granted, his idea was that it should be to any company that would construct the line. There had been too much subsidizing and bonusing of companies without any construction being done, but rather charters were peddled about. His idea was that this line should be an electric one, but he recognized that such would have its disadvantages in the winter. Careful attention would be given to the matter when the subsidy vote was under consideration. The line as projected would have to be 56 miles long, and would pass through Manotick, Burritt's Rapids, North Augusta, Merrickville, and Algonquin, Ont. (July, pg. 509.)

Ottawa and New York Ry.—A temporary bridge across the canal at Cornwall was expected to be completed by July 30, to replace the bridge destroyed by the recent washout on the canal. The question of the reconstruction of the permanent bridge is under consideration. Bids have been asked for the reconstruction of the bridge and also for the reconstruction of a small bridge nearer Ottawa, burned July 14. (Mar., 1905, pg. 94.)

Prince Edward Island Ry.—A resolution declaring that it is expedient that provision be made by the Government for the construction of a branch line from Harmony, on the Souris branch of the P.E.I. Ry., to Elmira, in Kings County, was on the order paper for the House of Commons in Committee, July 6. (July, pg. 471.)

Quebec Bridge and Ry. Co.—In giving evidence before the House of Commons Committee on the Quebec Bridge the Minister of Finance said the Government had never treated the subsidy as a loan, and as for the guaranteed bonds the Government had always assumed that it would take the responsibility. The Government considered the rebuilding of the bridge a necessity, and had practically arrived at a decision as to how it should be rebuilt.

The supplemental estimates submitted to the House of Commons July 10, provided for $25,000 for the preparation of plans for the reconstruction of the bridge, and $53,500 for the expenses of the Quebec Bridge Commission.

The Dominion Government, by resolution of Parliament, has decided to assume the whole of the assets and franchises of the Q. B. and R. Co., on the terms set forth in the contract between the Government and the company made under the act of 1903. The carrying out of the undertaking is placed in charge of the Transcontinental Railway Commission, with a view of having the bridge

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General Counsel—J. C. WALSH, Esq., M.P. (of Walsh & Walsh)

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constructed as an integral part of the new railway. The commission will, it is understood, entrust the work of preparing plans for the new bridge to a board of three of the best engineers available. The act provides for the appropriation from the consolidated revenues of the funds necessary to carry out the terms of the resolution. (July, pg. 471.)

Saskatchewan-Alberta.—The Boards of Trade of Saskatchewan and Alberta, at their recent annual convention, passed a resolution urgently requesting the Governments of those provinces to adopt a policy which will assure the early construction of colonization roads. The convention was asked by the Calgary Board of Trade to adopt a resolution asking the Governments of the two provinces to adopt a policy of guaranteeing the bonds of railways constructing lines. The particular line of railway which the Calgary Board had in view in putting forward its resolution was the extension of the Canadian Northern Ry. from Regina to Calgary. (See Canadian Northern Ry., July, pg. 469.)

Stanley Ry. and Manufacturing Co.—A joint stock company has been formed under the laws of the State of Maine, with this title, with office at Kitteny, Me., and a capital of $100,000 ($25,000 preferred and $75,000 common stock), with the object of establishing a woodworking factory at Ryan Brook, N.B., the terminus of York and Carleton Ry. The company has power to acquire the Y. and C.R., and we are advised that the line will be taken over if anything like the full amount of capital is subscribed. It is proposed that the line be extended from the present terminus about nine miles westerly to a connection with the National Transcontinental Ry. at Nappadoggin Lake. This extension will shorten by 13 miles the route to Marysville, Gibson, and Fredericton, from various points on the old Canada Eastern Ry. The line is one of those which the New Brunswick Government has asked the Dominion Government to take over and operate in connection with the Intercolonial Ry. If the Dominion Government does not take over the railway, or the sale to the Stanley Ry. and Manufacturing Co. does not take place, we are advised that the present owners will start construction on the extension to the Transcontinental Ry. in the spring, application having been made to the Provincial and Dominion Governments for subsidies. In the event of the Stanley Ry. and Manufacturing Co. being successfully organized, D. R. Moore, M.D., Manager of the York and Carleton Ry., will be President, and J. H. Curry, of Boston, Mass., will be Treasurer.

Temiskaming and Northern Ontario Ry.—The bridge across the Driftwood River was completed July 4, and it is expected that tracklaying will be gone on with to the north early in August. Grading on the last 30 miles to Cochrane, the junction point with the National Transcontinental Ry., is being pushed, over 1,100 men being engaged, and night and day gangs being employed. It is expected to have the line completed to Cochrane by the end of the year. (July, pg. 473.)

Victoria Lumber Co.—Several cars of rails have been shipped from Victoria for Comox, B.C., for use on the extension of the logging railway operated there by the Victoria Lumber Co. of Chemainus. (See Beaver Cove, B.C., July, pg. 471.)

York and Carleton Ry.—See Stanley Ry. and Manufacturing Co. (Feb., 1907, pg. 91.)

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The board of management of the provincial fair at New Westminster has decided to celebrate the Simon Fraser centenary, by the erection of a monument to be unveiled during the exhibition.

C. P. R. Betterments, Construction, Etc.

New Brunswick Developments.—H. P. Timmerman, who has been appointed Industrial Commissioner for the company's Eastern Lines, has begun his work in New Brunswick, where he is making an investigation of the opening for mining and industrial development. The company is reported to be negotiating for the purchase of several coal mines in the vicinity of Minto. To bring the coal from these collieries to its line the C.P.R. would have to build a line of about 20 miles from Minto to Fredericton. The collieries at Minto are already served by the New Brunswick Ry. and Coal Co.'s line, and this company's original charter gave it power to extend the line to Gibson, a station which would give an entrance into Fredericton.

Ottawa, Northern and Western Ry.—A considerable mileage on the line to Maniwaki, Que., has been relaid with 80-lb. steel.

Guelph and Goderich Ry.—The branch of this line from Linwood to Listowel, Ont., about 15 miles, was opened for traffic July 1.

St. Mary's and Western Ontario Ry.—The section of this line from Embro to St. Mary's, Ont., 18 miles, was opened for traffic July 1. At Embro connection is made with the extension of the Tillsonburg, Lake Erie and Pacific Ry. (leased by the C.P.R.), from Ingersoll, giving a connection not only with the company's main line, but with the line to Port Burwell, over which the company's coal traffic is carried, the connection with Ashtabula, Ohio, being made by the car ferry Ashtabula.

Komoka to Sarnia, Ont.—A Port Huron, Mich., press despatch states that the C.P.R. proposes to start construction in the spring of 1909, on a line from Komoka, on its main line west of London, to Sarnia, Ont.; that the trains on reaching Sarnia will be ferried across to Port Huron, and carried over the Pere Marquette Rd. to Chicago, Ill., via Detroit, over which line the C.P.R. is said to have secured running rights. This connection, it is said, will give the C.P.R. the shortest route from Montreal to Chicago. While it is true that the C.P.R. is surveying a line into Sarnia, and is negotiating for its construction, the projected route is from St. Mary's, via Parkhill and Arkona, and not from its main line at Komoka. The Pere Marquette Rd. does not have any line between Port Huron and Detroit, over which it could give running powers to Chicago, and any P.M. Rd. route from Port Huron to Chicago would not enable any company running between Montreal and Chicago to have the shortest route. The P.M. has been abandoning the principal part of its ferry traffic at Sarnia, and an official is quoted as saying that its Erie and Huron line from Rondeau to Sarnia, over which its Lake Erie car ferry traffic was formerly carried, is for sale.

Walkerton and Lucknow Ry.—The first section of this line from Saugeen Junction, near Proton, on the old Toronto, Grey and Bruce Ry., to Hanover, Ont., 27 miles, was opened for traffic July 1. The line passes through Princeville, Durham and Allen Park. The portion of the line between Hanover and Walkerton, 18 miles, is expected to be opened for traffic Aug. 1.

Fort William-Winnipeg Double Track.—The work of constructing the roadbed for the double-tracking of the line between Fort William, Ont., and Winnipeg, Man., is reported to be practically complete. Track has already been laid on 250 miles of this distance, and the work of laying the steel on the remaining 170 miles is being gone on with rapidly. It is expected that this will be completed, and the entire second track operated through from Fort William to Winnipeg by Sept. 1.

Moose Jaw Northwesterly.—Dispatches from Moose Jaw, Sask., stated that tracklaying was to be resumed early in July upon this branch, now ending at Tuxford, and that steel would be laid this season at any rate as far as Eyebrow, 50 miles from Moose Jaw. Grading has been completed for 15 miles beyond Eyebrow, and it is reported that grading will be done as far as the crossing of the Saskatchewan River this season.

A press report states that J. E. Noonan and J. Robinson, Regina, Sask., have taken a sub-contract upon this extension and are sending in 100 teams.

Calgary to Lethbridge.—It was reported in Calgary, Alta., July 7, that instructions had been issued for the making of surveys for the final location of a line between Calgary and Lethbridge, Alta.

Nicola, Kamloops and Similkameen Ry.—The surveys in progress in connection with the projected extension of this line are being pushed through, and late local reports state that it is expected to have everything completed in order to start construction in the spring of 1909. The projected extension is from Nicola to Midway, B.C., the present terminus of the company's Boundary section. The completion of this link would give the company a new and shorter connection between Southern Alberta and the Pacific coast than it now has.

Esquimalt and Nanaimo Ry.—The right-of-way for the extension to Alberni has been cleared, and about 400 men are employed on grading. The work had not been proceeding as fast as had been hoped, H. E. Beasley, Assistant to R. Marpole, Vice-President, recently stated, because of some difficulty in finally adopting the route. It is expected that 23 miles of the grading will be completed this season, out of the 58 miles of the branch. Survey parties are in the field working on the projected extension to Comox, but nothing will be done this year in the way of construction. A contract has been let for the clearing of certain areas of the company's lands at Qualicum to fit them for settlement. (July, pg. 475).

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I.C.R. Motor Cars.—In connection with the operation of motor cars on the Intercolonial Ry. the Minister of Railways said recently there was a difference of opinion between the railway officials and the railway brotherhoods as to the number of men to be employed. The brotherhoods were inclined to think that the cars ought to be manned with a larger number of men than the Department thought necessary. In the United States the companies manned their cars with one less man than the brotherhoods thought there ought to be on them. Negotiations were now going on for a settlement of this question, and when it was settled he would be in a position to state fully the cost of the motor car service as compared with the regular train service.

C.P.R. Connection with Halifax.—Ottawa dispatches state that negotiations will shortly be opened, or are in progress, between the C.P.R. President and the Department of Railways, with a view of securing running rights over the Intercolonial Ry. from St. John, N.B., to Halifax, N.S. A proposition with the same end in view was submitted to the Government in 1907, but it was not entertained. The report states that it is proposed that a tentative agreement for one year be entered into, the agreement and its results to form a basis at the end of the year for arbitration as to what would be fair terms for a permanent agreement. The C.P.R. had running rights into Halifax up to 1897, when the late Hon. A. G. Blair, then Minister of Railways, cancelled the agreement on the ground that the interests of the Intercolonial Ry. were suffering thereby.

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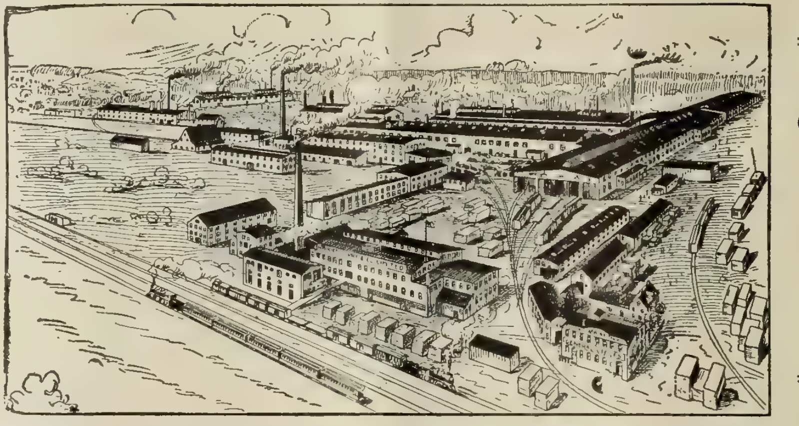

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Mechanical Draftsman
Machine Designer
Electrical Engineer
R. R. Const'n Eng.
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Chemist
Mining Engineer
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T. and N.O. Railway Report.

The sixth annual report of the Temiskaming and Northern Ontario Ry. Commission, for the year 1907, has been issued. The Commissioners say that on Dec. 31, 1907, there were 139 miles of railway under operation, from North Bay to Englehart. It had been intended to take over an additional 69 miles, to the crossing of the Watybeag River, but owing to the inclement weather retarding construction and other serious difficulties, it was thought advisable not to do so. At the close of the year, with the exception of some trestle filling the construction on the section referred to was fairly completed. The following particulars as to mileage, curvature, etc., are given:

North Bay to Englehart (1st division)..	138.5 miles.
Englehart to Cochrane (2nd division)..	114.5 "
Kerr Lake Branch	4 "
Charlton Branch	8 "
Sidings (1st and 2nd divisions)	40 "
Total	305 miles.
Length of curves (North Bay to Englehart)	50.14 miles
Length of curves (Englehart to Cochrane)	28 "
Total	78.14 miles
T. and N.O. Ry. crosses height of land..	mileage 177½
Ground elevation above sea level	1,044 ft.
Rail elevation above sea level	1,045 ft.
Track falls to south on gradient of	0.4%
Track falls to north on gradient of	0.5 to 0.2%
Gradients approaching summit from north to south, length	1 mile.

The telegraph stations on the line are: North Bay (C.P.R.); North Bay Junction; Widdifield, Moose Lake, Diver, Redwater, Temagami, Latchford, Cobalt, North Cobalt, Haileybury, New Liskeard, Uno Park, Earlton, Heaslip, Englehart; while there are telephone stations at North Bay, Woodland, Widdifield, mileage 20.50, mileage 23.50, Moose Lake, mileage 31, Diver, Jocko, Osbourne, Bushnell, Redwater, Doherty, Temagami, Rib Lake, Johnson, Latchford Cobalt, Haileybury, New Liskeard, Earlton, and Englehart.

The rolling stock account showed a total expenditure of $1,140,479.06, the number of locomotives, etc., on Dec. 31 being: 18 locomotives, 14 first-class coaches, 21 second-class coaches, two official coaches, 9 baggage, mail and express cars; 50 flat cars, 50 box cars, 10 stock cars, 9 vans, and a number of miscellaneous cars.

LIABILITIES.

Loan from Province of Ontario	$11,677,783.95
Accounts payable, miscellaneous	141,879.72
Unclaimed wages	687.90
Deposits on contracts	15,990.00
	$11,836,341.57

ASSETS.

Cost of road and equipment to Dec. 31, 1906		$ 9,426,228.37	
Cost of road 1st division, for 1907		494,903.61	
Cost of road 2nd division, for 1907		810,697.87	
Cost of road 3rd division, for 1907		175,799.82	
Cost of equipment for 1907		433,961.56	
		$11 341 591.23	
Less interest allowed on bank balance	$ 217.57		
Less net proceeds from sale of townsites and mining rights, applied on cost of road	23,397.16		
		23,614.73	
			$11,317,976.50
Accounts collectible, miscellaneous			6,276.11
" " operation			68,120.54
Chief Engineer advance			6,000.00
Stock of rails, 60 lb			47,137.02
" " 80 lb			237,256.38
Suspense—Accounts paid operation, covering freight charges and supplies awaiting certification of Chief Engineer			153,119.51
Cash in bank, Dec. 31, 1907			455.51
			$11,836,341.57

EARNINGS AND EXPENSES, 1906-1907.

RECEIPTS.

Passenger	$388,343.03	$254,759.33
Mails and express	29,217 56	17,596.35
Freight	390,894.29	230,552.63
Telegraph and telephone	26,404.17	20,514.53
Miscellaneous receipts	18,660.96	20,596.01
Total	$853,520.01	$544,018.85

EXPENDITURE.

Maintenance of way and structures	$112,395.22	$ 77,265.87
Maintenance of equipment	88,016.79	46,382.65
Conducting transportation	412,160.52	215,256 08
General expenses	32,839.76	23,587.98
Total	$645,412.29	$362,492.58
Net earnings	208,107.72	181,526.27
Ore royalties	50,901.32	....
Total net revenue	$259,009.04	$181,526.27
Operating expenses to earnings, percentage	75.6%	66%

GENERAL BALANCE SHEET, REVENUE ACCOUNTS, YEAR ENDED DEC. 31, 1907.

LIABILITIES.

Accounts payable	$232,431.43
Car mileage balance	1,247.33
Foreign ticket balance	18,010.47
Foreign freight balance	3,609.62
Foreign telegraph balance	2,931.49
Mining bonuses	103,201.59
Townsites accounts payable	223.92
Profit and loss	61,238.20
	$422,894.05

ASSETS.

Agents' and conductors' balance	$ 43,711.92
Accounts collectible	258,138.05
Cash in bank	30,052.33
Fuel and supplies on hand	86,012.21
Treasurer's petty cash	50.00
Insurance	4,929.54
	$422,894.05

GENERAL STATISTICS.

Passenger trains, 198,995 miles; freight trains, 198,215 miles; mixed trains, 8,718 miles, total train mileage, 405,928, against 245,563 miles in 1906. Passenger car mileage, 1,066,527 miles; freight car mileage, 2,596,937 miles; total car mileage 3,663,464, against 2,443,906 miles in 1906.

Passengers carried, 518,678, against 359,861 in 1906; passengers carried one mile, 16,633,635, against 10,365,311; average distance travelled, 32 miles against 29 miles; average amount received from each passenger, 74c. against 71c.; average amount received per passenger per mile, 2.33c., against 2.36c.

Freight carried, 393,589 tons, against 273,749 tons in 1906; tons of freight carried one mile, 26,312,225, against 15,233,761; average haul, 67 miles, against 55 miles; average amount received per ton, 99 cents, against 84 cents; average amount received per mile for each ton, 1.4 cents, against 1.5 cents.

Appended to the general report are lengthy reports from the Chief Engineer, the General Roadmaster, the Mining Engineer, the Physician, and copies of the various contracts entered into during the year.

The Premier and the Treasurer of Ontario state that the press reports recently current that it was the intention of the Government to extend the Temiskaming and Northern Ontario Ry. southerly from North Bay to a junction with the Canadian Northern Ontario Ry., near Parry Sound, and then secure running rights over that line into Toronto, was incorrect. The Government intended, said the Premier, to complete the construction of the line northwards before anything was done in the way of extensions, and no plans such as suggested had been brought to his notice either as a member of the Government or otherwise

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The Randolph Macdonald Co., Ltd., a contracting company, incorporated under the Dominion Companies Act, has been licensed to carry on its business in Ontario, with W. H. Marrow, Toronto, as its attorney.

Master Mechanics' Association.

The 41st annual convention of the Master Mechanics' Convention was held at Atlantic City, N.J., June 22, and following days. The Secretary reported that there were 862 active, 19 associate and 37 honorary members, and that there were four vacant scholarships at the Stevens Institute. The report of the Treasurer showed a balance on hand of $1,912.77.

Among the subjects discussed were, Mechanical stokers, Blanks for reporting work on engines, Proper width of track on curve, Smoke prevention and fuel economy, Washing out and refilling boilers, High-speed steel, The apprenticeship system, Superheating, Mallet compounds, Briquetted coal, Size and capacity of safety valves, Balanced compounds, Revision of standards, all of which were fully discussed.

The report of the committee on superheating was presented by H. H. Vaughan, Assistant to the President, C.P.R.

A number of topical discussions having been taken up, a resolution was passed authorizing the President to appoint a committee from its officers to confer with the American Railway Association when requested.

Following are the officers for the current year: President, H. H. Vaughan, C.P.R.; First Vice-President, G. W. Wildin, New York, New Haven and Hartford Rd.; Second Vice-President, C. E. Fuller, Union Pacific Rd.; Third Vice-President, J. E. Muhlfeld, Baltimore and Ohio Rd.; Treasurer, A. Sinclair; Executive Committee: H. T. Bentley, Chicago and Northwestern Rd.; T. Rumney, Erie Rd.; T. H. Curtis, Louisville and Nashville Rd.

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The Wellington Collieries, B.C.

It is reported from Victoria, B.C., that negotiations have been practically completed by which the control of the Wellington Collieries at Ladysmith, B.C., with the railways and steam and other vessels operated in connection with them, will pass from Hon. Jas. Dunsmuir, Lieut.-Governor of British Columbia and the Dunsmuir Estate. The leading men in the syndicate negotiating for the purchase are J. Arbuthnot, formerly of Winnipeg, and L. Wishart, of New York, who already own the South Wellington Colliery, adjoining the Dunsmuir properties. The value of the property is placed at about $5,000,000.

The Wellington Colliery Co.'s railway comprises 10.75 miles, and its Ladysmith extension 9.94 miles, a total of 20.69 miles. On the Ladysmith extension there are 7.94 miles of yard track and sidings, which makes a total of 28.63 miles of track of all kinds laid. The amount of stocks outstanding June 30, 1907, was reported to be $2,000,000. The statistics of the two lines have been reported separately, the figures for the year ended June 30, 1907, being:

Wellington Colliery Co.'s Ry.—Passengers, $2,381.80; freight, $2,778.77; total earnings, $5,160.57; operating expenses, $34,400.84; deficit, $29,240.27. Passengers carried, 4,238; freight carried, 455,733 tons; total revenue train mileage, 4,504 miles. Rolling stock owned: Six switching locomotives, one second-class car, five box cars, 14 flat cars, 172 coal cars, nine gravel cars.

Ladysmith extension.—Passengers, $494.65; freight, $36,893; total earnings, $37,333.87; operating expenses, $37,333.87; net earnings, nil. Passengers carried, 1,345; freight carried, 2,801 tons; total revenue train mileage, 37,334 miles. Rolling stock owned: One freight locomotive, six switching locomotives, six passenger cars, 17 flat cars, 236 coal cars, 11 gravel cars, one road car.

The company owns several steam and sailing vessels and charters others as the trade requires for carrying coal from the company's wharves at Esquimalt, to the various ports along the Pacific Coast, including San Francisco.

Marion Steam Shovels

for RAILROADS—MINES—CONTRACTORS

All Capacities — Prompt Shipment

SPECIFICATIONS SENT UPON REQUEST

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Coaling and Wrecking Cranes

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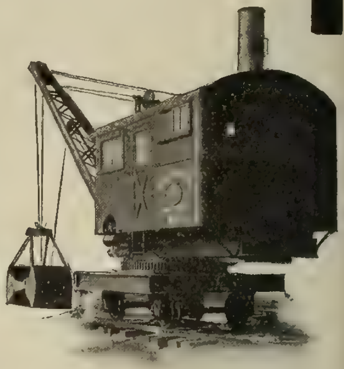

"INDUSTRIAL" Cranes combine every modern improvement

F·H·Hopkins & Co

CANADIAN REPRESENTATIVES
SUCCESSORS LATE JAS. COOPER

Montreal

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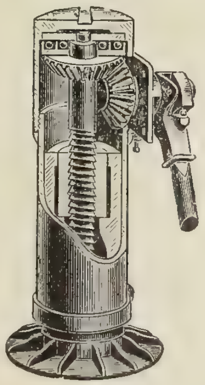
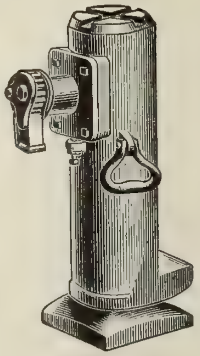
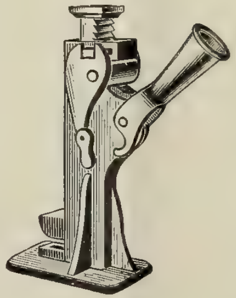
50 Styles 8 to 70 Tons Capacity
Carried in stock for IMMEDIATE DELIVERY



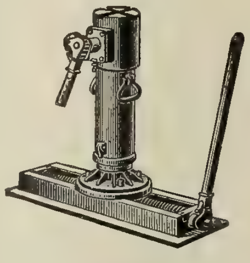
Sectional View



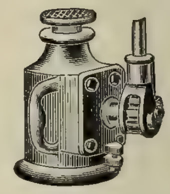
Foot Lift Jack



15 Ton Track Jack



Traversing Jack



Journal Jack

MANUFACTURED BY

A. O. NORTON, COATICOOK, QUE.

Stock Carried by MUSSENS LIMITED, MONTREAL

Railway Finance, Meetings, etc.

Alaska Central Ry.—The application for the appointment of a receiver for this company and the construction, company building it, was made recently to the courts at Fairbanks, Alaska, by J. E. Ballaine, who was the original promoter. He alleged fraud and mismanagement on the part of the present directors and officers in connection with construction, and jobbery in the handling of stock transactions. H. C. Osborne, Toronto, Vice-President, in a recent interview said the receiver was appointed without any notification of the application having been made to the company. The applicant represented no one but himself, and the charges were not only false but ridiculous. The whole of the facts were fully dealt with at the annual meeting of the company at Seattle, Wash., and the charges made in Ballaine's complaint were referred to a committee of the Seattle Chamber of Commerce. Since the present interests obtained control in Dec., 1904, Ballaine had been waging a constant warfare against the management because of the refusal to accept his suggestions as to location and other important matters of policy. Application will be made to have the receivership set aside. The line is not being operated.

Alberta Ry. and Irrigation Co.—The net earnings from all sources, exclusive of land sales for May, were $25,196, against $38,807 for May, 1907. Aggregate for 11 months ended May 31, $318,454, against $162,593 for same period 1906-07.

Atlantic and Lake Superior Ry., and Baie des Chaleurs Ry.—Tenders are being asked for the purchase of these two railways, together with all rolling stock, equipment, franchises and accessories. The A. & L.S. Ry. Co. was incorporated for the purpose of amalgamating the Baie des Chaleurs Ry., the Great Eastern Ry., and the Ottawa Valley Ry., and to construct the necessary connecting links to form a line from Gaspe, Que., to Lake Superior. The B. des C. Ry. was the only portion of the line operated, and was after considerable litigation taken over and operated by the bondholders in Great Britain. In June, 1907, the sale of the B. des C. Ry. to the Atlantic, Quebec and Western Ry., was confirmed by the Exchequer Court of Canada, and a scheme of interchange of bonds between the bondholders of the B. des C. Ry., the A. & L.S.Ry., and the A. & L.S. Ry. Trust Fund, was discussed at intervals throughout 1907. On Feb. 13, Galindez Bros., the principal bondholders, of London, Eng., made application to the Exchequer Court of Canada, to obtain a clear title to the B. des C. Ry., which had been sold to the A.Q. & W. Ry., with the result that that sale has been set aside and the decision arrived at to offer the properties for sale by tender. The railway statistics of 1907 show the A. & L.S. Ry. with a mileage of 100 (80 of this being the B. des C. Ry.); the gross earnings for the year being $68,886.32; there being a deficiency on operating of $1,234.67. The A. & L.S. Ry. runs from Caplin to Paspebiac, Que., 20 miles, where it joins the A.Q. & W. Ry.; and the B. des C. Ry. runs from Metapedia, where it joins the Intercolonial Ry., to Caplin, Que., 80 miles.

Cumberland Ry. and Coal Co.—Following are the directors and officers for the current year: President, H. R. Drummond; Vice-President, E. McDougall; General Manager, J. R. Cowans; other directors: D. Morrice, W. J. Morrice, G. L. Gains, P. Cowans, W. J. Crossen, J. D. Hayden; Secretary-Treasurer, E. Laflamme. P. Cowans and J. D. Hayden are new directors, taking the place of Sir Geo. Drummond, heretofore President, and of E. S. Clouston. H. R. Drummond, who has been elected President, is a son of Sir Geo. Drummond.

Dominion Atlantic Ry.—Special general meetings of the shareholders have been called to be held in London, Eng., Aug. 7, the first to pass by-laws increasing the number of directors from three to five, increasing the remuneration of the directors, and authorizing the directors to make contributions to the company's employes' sick and benefit fund, and the second for the purpose of electing two directors in addition to the three now holding office.

Gross earnings for May, $86,000, against $82,995 for May, 1907. Aggregate gross earnings for 5 months ended May 31, $364,000, against $362,626 for same period 1907.

Grand Trunk Ry.—Certain shareholders of the G.T.R., representing £1,500,000 of the company's stock, held a meeting in London, Eng., July 2, at which a resolution was passed directing the formation of a committee to "do all such things that it shall consider necessary in the interests of the shareholders." The shareholders present dissent from the decision of the directors regarding the formation of an advisory board in Canada. This question was raised at the last general half-yearly meeting, and the views of the Board, as expressed by the President, were strongly and decisively against the suggestion. Jas. Fairbairn, who presided at the shareholders' meeting, said the interests of the stockholders had been abominably violated by the Board, and that the G.T.R. was looked upon as an alien line in Canada.

London and South-Eastern Ry.—The following officers and directors have been elected for the current year: President, W. J. Reid; Vice-President, T. H. Smallman; Secretary and Treasurer, J. W. Little; other directors: J. Labatt, J. A. Campbell, M. Masuret.

New Brunswick Coal and Ry. Co.—The Royal Commission appointed by the N.B. Government to investigate the affairs of the old Central Ry. of N.B., which was subsequently amalgamated with the N.B.C. and Ry. Co., opened its sittings at Fredericton June 24. Sittings were subsequently held at St. John, Chipman, and Norton, and it was expected that the Commissioners would complete the taking of evidence and the examination of the company's books by July 30

The Central Ry. Co. was originally incorporated in 1871, and its powers varied and extended from time to time. The N.B.C. and Ry. Co., which had constructed an extension of the line to Minto, took over the old Central Line in 1903, and in 1905 and subsequently the N.B. Government took over the amalgamated lines, appointing a commission to carry out extensive repairs, and to operate the road.

Quebec Central Ry.—Gross earnings for May, $92,033.29; expenses, $63,427.45; net earnings, $28,605.84, against $87,032.08 gross earnings; $60,032.48 expenses; $26,999.60 net earnings, for May, 1907. Gross earnings for five months ended May 31, $432,252.99; expenses, $309,862.22; net earnings, $122,390.77, against $349,926.43 gross earnings; $249,940.15 expenses; $99,986.28 net earnings for same period 1907.

Quebec Southern Ry.—The insolvency of the St. Hyacinthe Bank, which recently closed its doors, is stated to have been due to advances made to railways and heavy litigation arising out of loans. In litigation before the Exchequer Court with regard to the lines making up the Quebec Southern Ry., the bank put in a claim for $622,691.74 on the sale price of the United Counties and Richelieu Valley Ry.

Temiscouata Ry.—Traffic receipts for May, $17,345.82; June, $18,242.88. Total receipts for 6 months ended June 30, $100,609.46.

Temiskaming and Northern Ontario Ry.—Approximate earnings for June, $75,617.25; total for 6 months ended June 30, $358,642.91.

Toronto, Hamilton and Buffalo Ry.—Following are the directors for the current year: W. K. Vanderbilt, W. H. Newman, H. B. Ledyard, J. N. Beckley, Sir T. G Shaughnessy, D. McNicoll, C. F. Cox, E. B. Osler, Nicol Kingsmill, W. P. Torrance, D'Arcy Scott

Gross earnings for May, $62,560, against $81,834 for May, 1907. Total for 11 months ended May 31, $792,454, against $778,663 for same period 1906-07.

White Pass and Yukon Ry.—An interim dividend at the rate of 4s. sterling per share has been declared on account of the operations for the year ended June 30.

Gross earnings for 11 months ended May 31, $1,357,589.

Railway Lands Patented.

The following letters patent covering Dominion lands situated in Manitoba, Saskatchewan, Alberta, British Columbia and Yukon Territory, were issued in April:

	Acres.
Canadian Northern Ry	187.92
Canadian Pacific Ry	794.70
Canadian Pacific Ry. roadbed and station grounds	25.17
G. T. Pacific Ry	308.75
Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co	158.00

The following were issued during the year ended Mar. 31:

	Acres.
Calgary and Edmonton Ry	85,975
Canadian Northern Ry	2,138,422
Canadian Pacific Ry. grants	377,427
Canadian Pacific Ry. grants, Souris branch.	94,611
Canadian Pacific Ry. roadbed and station grounds	1,062
Manitoba and Southeastern Ry	676,160
Manitoba and Northwestern Ry	29,421
Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co	5,911
Saskatchewan and Western Ry	98,886

C.P.R. Hotel Licenses.—The C.P.R. not having applied for a renewal of the license for its hotel at Moose Jaw, Sask., this year, gave rise to a report that the company had decided to discontinue the sale of spirituous liquors at all its hotels. We were advised that the conditions at Moose Jaw were purely local and that the main reason which prompted the management not to procure a license this year was because there was no public bar in the hotel, and that the high cost of a license would not warrant the keeping of liquors for sale simply to guests We have since been advised that the company has decided to abandon its hotel at Moose Jaw altogether and to utilize for station and office purposes the space thus made available. The matter has been under consideration for some little time and it is now thought that the time has arrived when the company should not compete any further with private enterprises at Moose Jaw in connection with the hotel business. There is nothing in the report that the company has decided to abolish bars at its various hotels.

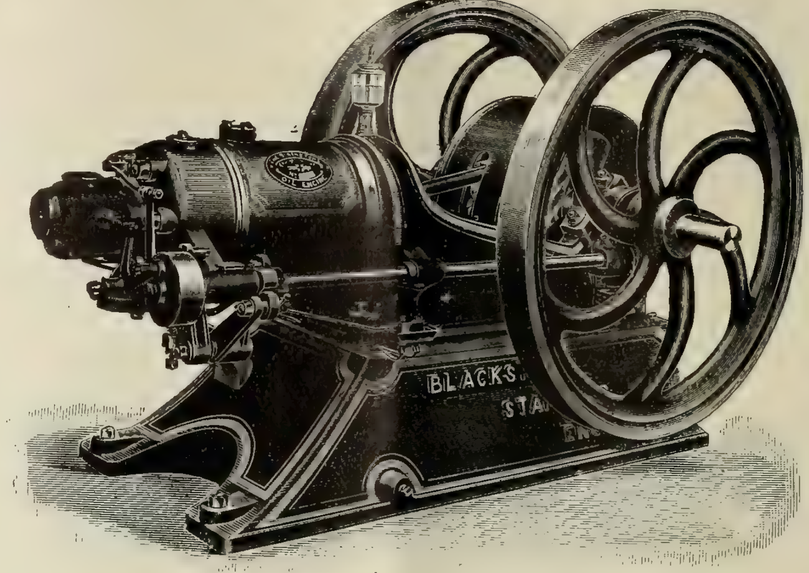
The Canada Railway News Co., Toronto, has bought out the restaurant business at the G.T.R. station, Hamilton, Ont., from Geo. Moore, who has conducted it for 29 years, his father having previously carried it for 11 years. His son, H. A. Moore, will manage it for the Canada Ry. News Co.

The Diamond Vale Collieries, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $750,000, to acquire the rights and properties of the Diamond Vale Coal and Iron Mines, Ltd., and in connection therewith to construct and operate railways, tramways, bridges, etc.; to purchase or otherwise acquire and to operate wharves, docks, steam and other vessels for the conveyance of coal and other of the company's products.

BLACKSTONE OIL ENGINES

ARE

- Clean
- Simple
- Reliable
- Economical
- Self-contained
- Well-made



HAVE NO

- Fans
- Sparks
- Bad Odor
- Electric Battery
- Exterior Flame when operating

Blackstone Engine with Oil Tank in Base

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS, TORONTO, ONT.

DISTRICT OFFICES: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

ADDITIONAL SAFETY AND ECONOMY IN

TRACK MAINTENANCE

has been proved by the use of Continuous, Weber and Wolhaupter base-supported rail joints—after ten (10) years' service, having a record of over **25,000 miles in use**—the extent of which is evidence of their excellence.

HIGHEST AWARDS
Paris, 1900;
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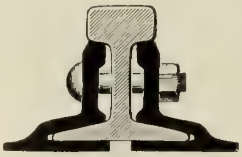
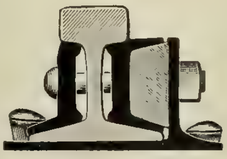


CONTINUOUS JOINT

Over
25,000
miles
in use



WEBER JOINT

Rolled
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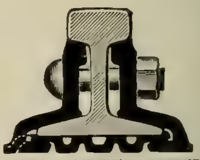
Quality
Steel



WOLHAUPTER JOINT

CATALOGUES AT AGENCIES

Baltimore, Md. Boston, Mass. Chicago, Ill. Denver, Colo. Pittsburg, Pa.
Portland, Oreg. Seattle, Wash. St. Paul, Minn. St. Louis, Mo. Troy, N.Y.
London, Eng. New York City.

THE RAIL JOINT COMPANY OF CANADA, LIMITED

OFFICES: BOARD OF TRADE BLDG., MONTREAL, CAN.

Makers of Rail Joints for Standard and Special Rail Sections, also Girder, Step or Compromise, and Insulating Rail Joints, protected by Patents in U.S., Canada and Mexico.

Quebec Central Railway Report.

Following is a summary of the report for the year 1907, presented at the annual meeting in London, Eng., May 6:

1906.		1907.
$904,866	Gross earnings	$1,012,741
582,916	Working expenses	698,420
$321,950	Net earnings	$ 314,321
6,174	Interest earned	6,790
$328,124	Net revenue	$ 321,111

This statement shows an increase in gross earnings of $107,875, an increase in working expenses of $115,504, and a decrease in net earnings of $7,629. A sum of $51,000 for renewals has been included in the working expenses of 1907, which would, under the method adopted in previous years, have been appropriated from net revenue at the close of the year. The addition of $12,700 brought forward from 1906 to the net revenue made the available balance $333,811. After providing $100,865 for the year's interest on the outstanding prior lien bonds and 4% debenture stock issued, $40,000 has been charged against net revenue for renewals and improvements to bridges and culverts on the Tring and Megantic branch. There then remained a balance of $192,946, out of which has been paid interest on 3% second debenture stock, and full interest on 7% income bonds. These two payments absorbed $164,493, and left a surplus of $28,453. From this a special appropriation of $13,000 has been made for the purpose hereinafter referred to, leaving $15,453 to be carried forward. For the first time in the history of the company the gross earnings for the year exceeded $1,000,000.

At Dec. 31, 1907, £400,337 of the 4% debenture stock had been issued. Of this £270,500 had been used for retiring 5% prior lien bonds, of which £95,000 were outstanding on Dec. 31, 1907. Since the close of the year the outstanding bonds have been paid off, therefore the 4 per cent. debenture stock now ranks as a first charge on the entire undertaking.

Towards the close of the year grave irregularities in the accounts of the Treasurer, A. H. Anderson, an old and trusted servant of the company, were discovered by the auditors. Investigation revealed that a large sum had been abstracted. His estate has been assigned to a trustee for the benefit of creditors, but it is feared that the company's ultimate loss will amount to about $85,000. This estimated deficit has been provided for from accumulated balances, and by the transfer from the year's surplus of $13,000, the balance to the credit of reserve contingent fund remaining unchanged. The ex-Treasurer has been tried and, having pleaded guilty, sentenced to five years' imprisonment.

An act to amend the charter of the railway will be submitted to special meetings of the various classes of security holders, and resolutions will be proposed to give effect to the terms thereof. The accounts have been audited by M. Young & Sons, accountants, Toronto.

GENERAL BALANCE SHEET.

Cost of main line extensions and equipment, Dec.31,1906,less credits		$8,767,953.90	
Capital expenditure 1907—			
Diversion of 2½ miles of Chaudière Valley br'ch	$27,865.74		
New equipment	79,829.79		
New stations and buildings	19,110.22		
New wharf property	32,226.56		
Sundries	16,233.19		
		175,265.50	
			$8,943,219.40
Brought forward			$8,943,219.40
Investments			53,434.29
Sundry outstanding accounts			100,971.85
Sundry outstanding traffic accounts			26,697.95
Old rails			7,552.42
Materials and supplies			80,266.51
Fuel			30,438.88
Cash in hand and in bank			47,067.13
Cash in transmission			9,658.55
Cash in bank in London			213,702.30
			$9,513,009.28

Share capital	$3,381,603.33
5% prior lien bonds	462,333.33
4% debenture stock	1,948,306.73
3% debenture stock	1,644,933.33
7% income bonds	1,644,933.34
Wages unpaid, Dec. 31, 1907	24,472.53
Sundry outstanding accounts	122,045.84
Sundry outstanding traffic accounts	825.75
Interest on prior lien bonds unclaimed, accrued but not due	11,754.44
Interest on 4% debenture stock accrued but not due	34,454.37
Interest on 3% debenture stock unclaimed	601.65
Interest on 5% income bonds unclaimed	2,907.69
Interest on 7% income bonds unclaimed	7,104.15
Reserve contingent fund, Dec. 31, 1907	6,786.60
Net revenue balance Dec. 31, 1907	179,946.20
	$9,513,009.28

RECEIPTS FOR YEAR 1907.

Passenger	$ 305,895.75
Freight	670,259.97
Mails	17,670.64
Express	8,600.00
Miscellaneous	10,314.52
	$1,012,740.88

EXPENDITURES FOR YEAR 1907.

Conducting transportation	$ 136,244.12
Maintenance and working locomotives.	241,485.15
Maintenance of cars	57,268.40
Maintenance of way	165,264.65
General expenses	48,489.39
Miscellaneous expenses	49,668.43
*Total working expenses	$ 698,420.14
Balance carried to net revenue account.	314,320.74
	$1,012,740.88

*Per cent of gross earnings........ 68.96

NET REVENUE ACCOUNT DEC. 31, 1907.

Balance brought forward	$ 12,699.75
Balance from revenue account	314,320.74
Interest earned	6,790.13
	$ 333,810.62
Betterments and improvements to bridges, culverts, Tring and Megantic branch	$ 40,000.00
Interest paid, accrued, and unclaimed, on prior lien bonds to Dec. 31	30,994.58
Interest paid and accrued on 4% debenture stock to Dec. 31	69,869.84
Amount appropriated towards Treasurer's defalcations	13,000.00
Balance carried to general balance sheet	179,946.20
	$ 333,810.62

The President, E. Dent, in moving the adoption of the report and accounts, said: The gross earnings for 1907 were $1,012,741, an increase of $107,876 over 1906, while the net earnings were $314,321, a decrease of $7,629. This decrease is partly due to higher wages, the greater cost of coal and other materials, and to the severe weather experienced in the winter of 1907, compared with an exceptionally mild winter in the previous year. $51,000 has been charged to working expenses for special renewals, etc., which, under the method adopted in previous years, would have been appropriated from net revenue at the end of the year, so that for purposes of comparison, if this sum were deducted, the net earnings would show an increase of $43,371, as compared with 1906. After paying interest on the debenture stocks and the full 7% on the income bonds, $40,000 has been appropriated for the renewal of bridges and culverts on the Tring and Megantic branch, and the balance of $15,452 has been carried forward. The Tring and Megantic branch was built some ten years ago, wooden bridges and culverts being used; these are being replaced by steel and masonry structures. On Feb. 1 the outstanding 5% prior lien bonds were paid off, 4% debenture stock being issued to take them up; there will, therefore, be an annual saving of 1% on the bonds redeemed.

At the last meeting reference was made to proposed alterations on the Chaudiere Valley branch, rendered necessary to obviate the frequent damage caused by floods. During 1907 2½ miles was rebuilt, and the track of the existing line was raised for another 3½ miles on the portion most liable to flood, at a cost of $27,865. There still remains 2½ miles of line to be rebuilt, and about 4 more to be raised, and when this is completed, the Chaudiere Valley line will be free from any danger from floods. $11,000 has been expended in strengthening the bridges on this branch, but this amount will be charged out in the current year. The additional facilities secured at Levis by the purchase of the new wharf have been of great assistance to the railway, enabling it to easily handle the increased traffic and facilitate the coaling of the engines. During the year considerable additions to the rolling stock have been made and generally the line has been well kept up.

The directors, E. Dent, A. Bremner, T. Lindley, F. H. Norman, London, Eng.; and F. Grundy, Sherbrooke, Que., were re-elected for the current year.

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The Erie and Huron Railway.

An official of the Pere Marquette Rd. is quoted as stating: "The E. and H. Ry. is a white elephant on the P.M.'s hands, and it can be purchased very cheaply."

The E. and H. Ry. Co. was incorporated by an act of the Ontario Legislature in 1873, and was declared to be subject to the legislative authority of Canada by an act of the Dominion Parliament in 1884. An agreement to amalgamate with the Lake Erie and Detroit River Ry. was confirmed by the Dominion Parliament in 1902. The line extends from Rondeau, on Lake Erie, to Sarnia, 72.63 miles, with a ferry connection at the latter point with Port Huron, Mich. The railway did a considerable coal business, a car ferry being operated to Rondeau by one of the coal carrying lines on the Ohio side of the lake. The line was acquired by the Lake Erie and Detroit River Ry. for the purpose of securing an entrance into the United States. When the Pere Marquette Rd. acquired the L.E. and D.R. Ry. it constructed slip docks at Walkerville, Ont., and Detroit, Mich., for its car ferry service, and also transferred the coal-carrying trade from Rondeau to Port Stanley. As a result the coal handling plant at Rondeau is practically unused, and the line to Sarnia does nothing but a local business.

In 1884 the Dominion Parliament voted $3,200 a mile for 30 miles for a line from Wallaceburg to Sarnia, and a contract was entered into with the company for the construction of the line, Aug. 27, 1885. Under an order-in-council of Dec. 5, 1886, the whole amount of the subsidy, $96,000, was paid, the whole 30 miles having been constructed, inspected and passed. In 1890 a further subsidy was voted to the company towards the construction of 22 miles of railway from Petrolea via Oil Springs to Dresden, Ont., at the rate of $3,200 a mile, but no contract has been entered into under it, and so far as the E. and H.R. is concerned the subsidy has lapsed. It also received a subsidy of $2,000 a mile from Ontario in respect of 40.556 miles of line, and bonuses from municipalities amounting to $257,500.

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The C.P.R. is reported to have entered into a contract with the Buffalo, Rochester and Pittsburg Rd., for the purchase of a minimum of 225,000 tons of coal a year for two years, ending April 30, 1910. The B., R. and P. Ry. has agreed to supply up to 300,000 a year if required.

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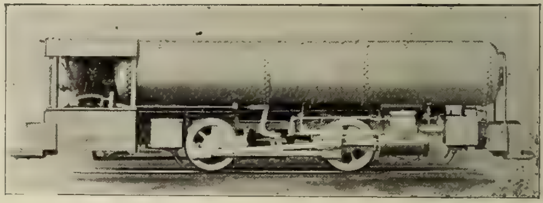

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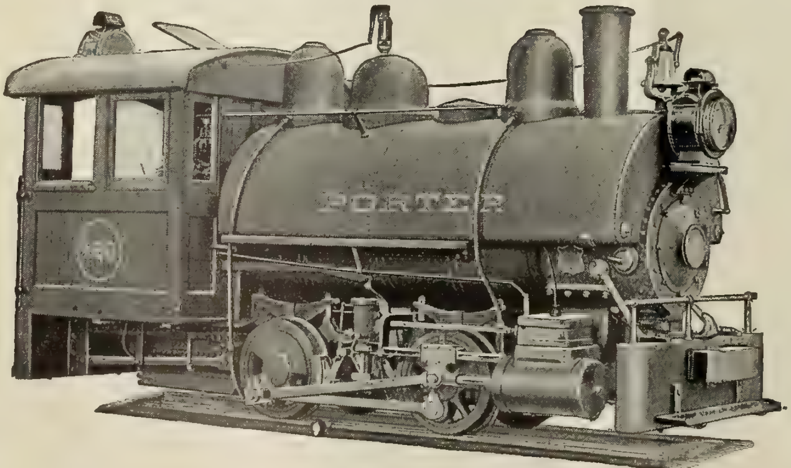

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National Transcontinental Railway.

The question of the cost to the Dominion of the Eastern and Western Divisions of the National Transcontinental Ry., under construction from Moncton, N.B., to Winnipeg, Man., by the Transcontinental Ry. Commission, and from Winnipeg to Prince Rupert by the G.T. Pacific Ry., has been made the subject of considerable discussion. On July 6, the Minister of Railways stated that he expected the railway would be fully completed by Dec. 1, 1911. The cost he now estimated at $63,437 per mile, not including allowance for interest for the 1803.55 miles between Moncton and Winnipeg. The cost of the terminals at Winnipeg is placed at $2,000,000, and of the terminals at Moncton at $97,000. In regard to the joint terminals at Winnipeg, by the agreement with the Canadian Northern Ry., the value of the lands on which the station and terminals are to be located is fixed at $2,625,000. Upon this valuation the Government and the G.T. Pacific Ry. is to pay, in equal shares, one-half of 4% a year. The amount of the valuation includes grading, levelling and filling, but does not include the buildings and the tracks. The Canadian Northern Ry. is to supply these, and the Government and the G.T. Pacific Ry. are to pay in equal shares one-half of 4½%. The assumed cost is set down at $2,000,000, making the amount payable by the Government yearly at $22,500, or the total for the Winnipeg terminals of $48,710. As to the G.T. Pacific prairie section from Winnipeg to Wolf Creek, 119½ miles west of Edmonton, has been located. The estimated cost of construction has been set down at present at $61,520,000.

On July 7, Hon. R. L. Borden made a lengthened statement as to the cost of the railway. The estimate was based upon the figures supplied by the Government from time to time, and those obtained from private investigation. He said the 1803.55 miles from Moncton to Winnipeg at $63,427 a mile, not including the Quebec Bridge, would amount to $114,393,765. Allowing five years for the period of construction, there would be an average of 2½ years simple interest at 3½% a year to be met, or a total of $10,009,454, making the cost of the Eastern Division, at completion, $124,403,219. To this must be added seven years' interest at 3%, after completion, during which the G.T. Pacific is to pay no rent, $26,124,676; and 3% for three years additional, during which no rent is collectible unless the earnings are sufficient, $11,196,290, making a total of $161,724,185. The cost of the Quebec Bridge to Mar. 1, 1907, was $5,422,238, and the estimated cost of completion, $9,000,000, making $14,422,238; while the estimated cost to the Government of the terminals at Winnipeg, Quebec and Moncton, and the shops at points east of Winnipeg, was $5,470,000. Then there was the interest which the Government had to pay on the Mountain section of the Western Division, without recourse, $9,689,400 (which figure he corrected to $11,304,300 on July 8), altogether cash liabilities of $191,305,823 (or as corrected, $192,920,723). In addition to that amount the Government had contracted to incur various obligations on the guarantee of bonds as follows: Liability on guarantee of bond issue on Mountain section, 75% on cost of 816 miles, estimated at $61,520,000, or $46,140,000; liability of bond issue on Prairie section, 916 miles at $13,000 a mile, $11,908,000. This made up a cash expenditure and liability of $191,305,823; and liabilities on bond guarantees of $58,048,000, or a total of $249,353,823, and as corrected July 8, a total of $250,968,723.

On July 12, the Minister of Railways made a statement in reply to Mr. Borden, in which he accepted a number of the figures given, but repudiated others, amounting to some $97,000,000. He accepted the figure of $114,393,765 as the cost of the Eastern Division; $10,009,454 interest during construction, $26,124,676 seven years' interest after completion, and placed the cost of terminals at $3,500,000. It was expected that the line would pay from the outset, consequently the interest for three years' rental which could be collected only if earned, was cut out; as also was the cost of the Quebec Bridge, which was not part of the undertaking. In regard to the Eastern Division, all the burden that would fall on the country was the $26,124,676, the interest for the seven years after completion, during which no rental was payable by the G.T. Pacific Ry. As regards the Mountain section, he did not believe that Canada would ever be called upon to pay one cent of the guarantee.

These figures were given in the course of the discussion on the voting of $30,000,000 for surveys and construction on the Eastern Division.

Track was laid in Moncton, N.B., to within a few hundred yards of the Intercolonial Ry. station, June 24, and will run parallel to that line into the station. A steam shovel has been put on the track, and grading for the permanent track is going on. The starting of work at this point was evidently a surprise to the citizens, as although several surveys had been made for the line in the city limits, no announcement had been made as to the route to be followed.

Tenders are being called for and will be received up to Aug. 20, for construction of the following sections:

District C.—From Weymontachene, Que., 196.38 miles west of the north abutment of the Quebec Bridge (being the boundary between Districts C and D), westerly for about 107 miles; to be completed by Dec. 31, 1910.

District C.—From 107 miles west of Weymontachene, Que., westerly to the end of the G.T. Pacific Ry. Co.'s contract, about 114.97 miles; to be completed by Dec. 31, 1910.

Districts D and E.—From the western end of Fauquier Bros.' Abitibi contract in Ontario, westerly for about 104.24 miles; to be completed by Dec. 31, 1910.

District E.—From about 60 miles west of the easterly boundary of District E, in Ontario, easterly to the end of Fauquier Bros.' contract north of Lake Nipigon, Ont., about 100 miles; to be completed by Dec. 31, 1910.

Districts E and F.—From the western end of Fauquier Bros.' contract north of Lake Nipigon, Ont., westerly to Dog Lake, Ont., about 126 miles; to be completed by Sept. 1, 1910.

District F.—From Dog Lake, Ont., to mile 2.6 west of Peninsula Crossing, by alternative routes, being about 23.76 miles by the northerly, and 24.13 miles by the southerly route; the selection of the route to be at the option of the Commissioners; to be completed by Sept. 1, 1910.

GRAND TRUNK PACIFIC RAILWAY.

The bridge which the G.T. Pacific Ry. is constructing across the Kaministikwia River at Fort William, Ont., on its Lake Superior branch, will consist of one 258 ft. through swing, and one 125 ft. through riveted truss spans, having an extreme width of 48 ft. The floor of the bridge is arranged to carry one railway track, two roadways and two sidewalks. Provision is made for an electric railway track on the roadway. The substructure consists of two abutments, built on pile foundations driven to the solid rock, and two piers built of concrete from the rock line. The pier carrying the swing span is toward the northern bank of the river, leaving a navigable channel of 100 ft. with a maximum depth of 23 ft., and a minimum depth of 15 ft., for a few feet at the southern pier. On the north side of the centre pier there is a depth of over 20 ft. for about 40 ft. from the pier. The bed of the rail will be 33 ft. above water level. The bridge is being constructed in accordance with the Dominion Government specifications for the class of bridge designed to carry heavy traffic.

Tracklaying is going on continuously on the line west from Saskatoon, Sask., and in the week ending June 29, 30 miles of steel were laid. In the yards at Saskatoon, large numbers of cars of material, and steel rails and ties for many miles of track are stored, and several carloads of steel for the bridge over the Battle River are waiting to be sent forward. This point is 630 miles west of Winnipeg, and 169 miles east of Edmonton, Alta. F. W. Morse, Vice-President, returned to Montreal July 5, after having gone over the line as far as track had been laid. It is expected that a considerable portion of the mileage to the Battle River will be opened Sept. 1, for the hauling of grain to Winnipeg.

Tracklaying on the line between Portage la Prairie and Winnipeg was completed July 13.

Beyond Battle River, nearly the whole of the grading into Edmonton has been completed, and it is hoped to have the track laid by the winter. On this section of the line is the big bridge across the Saskatchewan River at Clover Bar. The bridge has a total length of 1,560 ft., and is carried on four concrete piers in the river, two abutments, and 30 pedestals on the banks. The river piers have a total height of 124 ft., the distance from footing to lower seat being 92 ft.; from footing to upper seat, 98 ft.; and from footing course to bottom of foundation, 26 ft. The measurement at lower seat is 11 by 26 ft.; and at foundation, 41 by 87 ft. 6 in.; while the batter is half an inch to the foot. The total amount of the concrete contained in each pier is 4,171 cubic yards. The steel for the superstructure is in course of delivery.

West of Edmonton the grading on the 129 miles westerly to Wolf Creek is in a forward condition and it is expected to have it completed and ready for the rails by the fall.

In connection with the construction of the line through British Columbia, the Provincial Government has promised to give substantial assistance towards opening up a road through the Revelstoke district for taking in supplies and men for the construction of the 79 mile section through the Yellow Head Pass to Tete Jaune Cache, and 150 miles west, provided the contractors adopted the Revelstoke route and undertook to purchase supplies in the province. During his visit to the west, F. W. Morse, Vice-President, stated that an announcement would shortly be made with respect to the letting of contracts for the 100 miles from Wolf Creek to the Yellow Head Pass, and for 79 miles west of the Pass, the tenders for which had been received.

Considerable progress is reported to have been made on the line in the mountains near Prince Rupert. Foley, Welch and Stewart, the contractors, have let a number of sub-contracts, the firms engaged being: Neil Keith, J. E. Bostrom, McDonald and MacAllister, M. Shady, A. Stewart, Harstone and Stainer, McDonald and Perry, Dudley Bros., A. Ross, N. McLeod, D. Harrigan, F. Peterson, Washbok & Co., J. Albi, A. Filigno, D. A. Rankin, D. Stewart, and the Prince Rupert Construction Co. These sub-contracts practically cover the mileage for which the contract has been let, with the exception of about 15 miles north of Graveyard Point, which the general contractors are doing themselves. (July, pg. 467.)

* * *

The Nova Scotia Government has approved of by-law D of the Maritime Coal, Ry. and Power Co., fixing tariff for freight and coal on its line. The Government, however, ordered the reduction of the rate on coal from 40c. per gross ton to 30c. per gross ton between Maccan and Jubilee, Strathcona River, Hebert and Minudie, and to 32c. per ton from Maccan to Prospect and Joggins.

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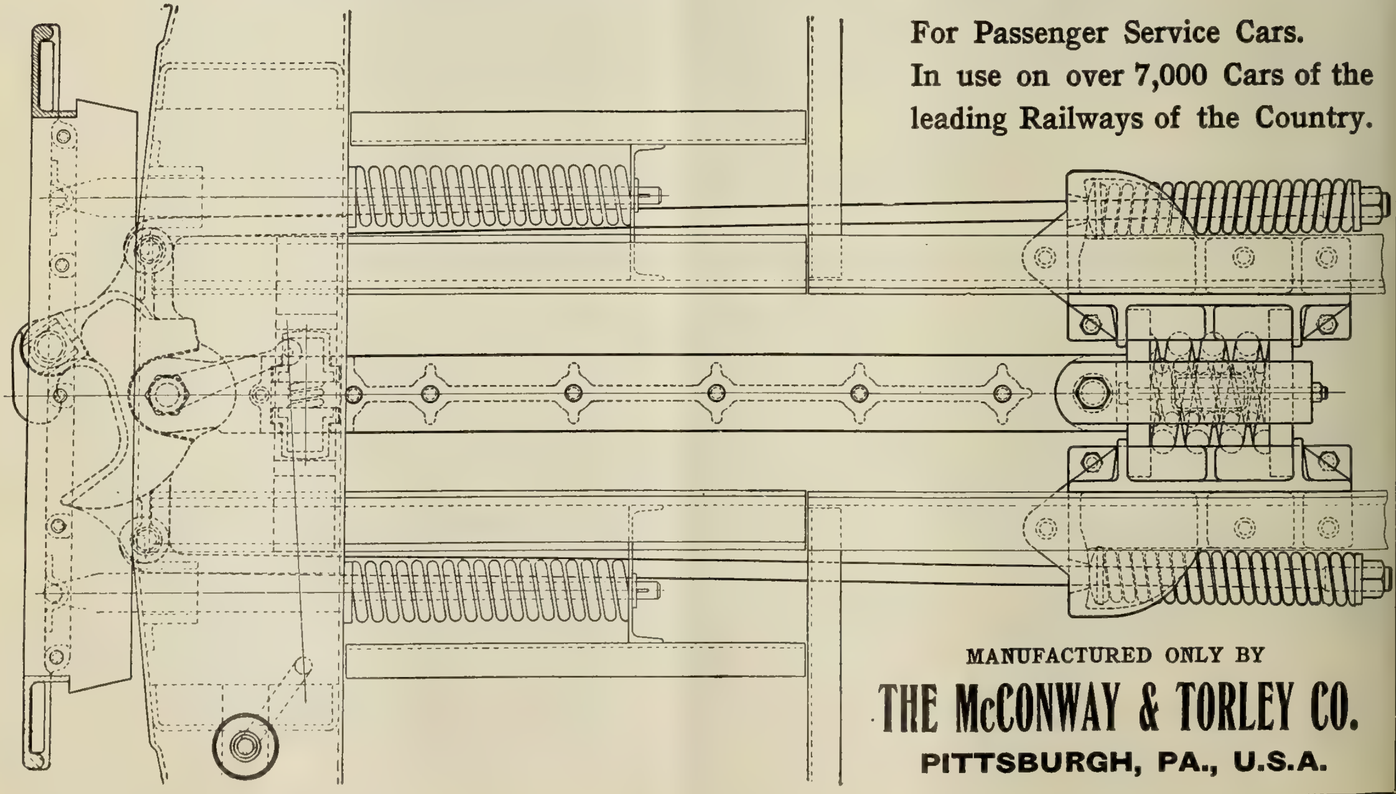

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Railway Commissioners' Traffic Orders.

M.C.R. SWITCHING CHARGES AT ST. THOMAS.

4796. May 20. In the matter of the complaint of the John Campbell Co., Ltd., of St. Thomas, Ont., alleging that the Michigan Central Rd. Co. was charging excessive tolls for switching cars to and from complainant's mill in City of St. Thomas; and applying for an order directing that the tolls be reduced. Upon hearing what was alleged on behalf of the complainant, and counsel for the railroad company, and upon the report of its Chief Traffic Officer, the Board orders that the toll to be charged by the railroad company from or to its point of interchange with the Pere Marquette Rd., for the switching of the cars in question delivered to the P.M.R. by the G.T.R., or by the P.M.R. to the G.T.R., be $3 a carload. And the Board orders that the railroad company refund to complainant the difference between the charges made and the amount provided in this order, from the date of the receipt by the railroad company of the Chief Traffic Officer's report, viz., July, 1907, with interest at 5% per annum on the excessive payments from the date of each payment down to the date the refund is made. And the Board orders that this order be without prejudice to variation or rescission, either upon the application of the railroad company or the application of complainant, or upon the motion of the Board, if it does not harmonize with the conclusions arrived at by the Board when the general interswitching matter is disposed of.

Following are extracts from Chief Commissioner Mabee's judgment in this case: "The complaint is one of long standing, and the Board does not think that the matter should be allowed to stand indefinitely to be disposed of with the other interswitching cases that have been before the Board for some time. The case differs very materially from the Peterborough Sandstone Brick Company's, which was also heard the same day, and which was allowed to stand, because in that case an attempt was made, with some degree of success, to show that the charges made for the switching complained of there were not unreasonable, and evidence was given for the purpose of showing the expense the railway company was put to in connection with the work done and for which the tolls were being exacted. This case is in a different position.

"There is a charge here made by the M.C.R. for switching cars to and from this mill, which seems to the Board to be entirely unreasonable and out of proportion to the service rendered. It has been going on for a long time. The railway company has had every opportunity to justify the charge and give evidence for the purpose of showing that the toll at least bears some reasonable proportion to the expense and labor involved in connection with the service. The railway company is content by simply doing nothing but continuing to make the charge, and then, when an opportunity is given to justify the charge made, all that is requested is that the matter be further delayed.

"The applicant contended that the tolls should be reduced, I think, to $1 a car in one case, and perhaps $2 in another. We are, without any assistance from the railway company for the purpose of enabling us to judge from its point of view what would be a reasonable charge. We have, however, the report of the Board's Chief Traffic Officer, made July 9, 1907, and rather than accept the statements made by applicants as to what they thought was a fair charge, the Board thinks, under the circumstances, it would be more reasonable to adopt the figures at that time furnished by its own officer, a copy of which was sent to the railway company's solicitors July 19.

"The Board's Traffic Officer's report was sent to the solicitors of the railway company on July 19, 1907. The railway company has continued making the charges as to which the complaint was lodged, notwithstanding the suggestion made at that time; and the Board thinks, under the circumstances, that it is a reasonable and proper thing that the railway company should refund to the applicant the difference between the charges made and the figures I have just indicated, as being in the Board's judgment fair for the service rendered, from the date of the receipt of the Traffic Officer's report, namely, July 19, 1907, together with interest at 5% on the excessive payments from the date of each payment down to the date of the refund."

SYDENHAM GLASS CO'S COMPLAINT.

June 8, 1908. The Secretary of the Board has sent the following letter to the Chairman of the Advisory Committee of the Canadian Freight Association:

"Referring to the complaint of the Sydenham Glass Company herein, I am directed to inform you that the Board is of the opinion that the sample of glassware in question is clearly a jar and not a bottle, and to this end the contention of the railway companies must prevail. It seems, however, that the applicants did not fully develop their case in 1904 when they obtained the ruling of the Board dealing with bottles, and they should have a further opportunity to present such evidence or argument as they may desire with the view of bringing the present article within the principle of the Board's decision relating to bottles; that is to say, if they are of the opinion that the same can be done. The Board will, therefore, fix a day for the hearing if the applicants wish to pursue the matter further."

SPECIAL FREIGHT RATES RE CORNWALL CANAL BREAK.

4924. June 25.—In the matter of the application of the G.T.R. and the C.P.R. Companies for permission to carry under special rate notices certain freight traffic for delivery to them by vessel owners at Kingston, Brockville, and Prescott, Ont., for transportation to Montreal: Whereas the applicant companies have made a joint telegraphic application to the Board, under sec. 342 of the Railway Act, for permission to carry under special rate notices certain freight traffic for delivery to them by vessel owners at Kingston, Brockville, and Prescott, for transportation to Montreal, the said ports being competitive points, for which the said vessel owners have issued bills of lading at western lake ports, and which they are unable themselves to carry to Montreal in consequence of an interruption to navigation caused by a break in the Cornwall canal; it is ordered that by consent of the companies they be permitted to provide for the traffic aforesaid by the immediate issue and filing of special rate notices, to be followed by the publication and filing of special tariffs which shall be so published and filed with no greater delay than may be necessary for their preparation and printing; provided that the said special tariffs do not discriminate as between shippers, localities, or commodities, or otherwise infringe the provisions of the Railway Act; such special tariffs to take effect as of this date.

CHARGES FOR INTERSWITCHING.

4988. July 8. In the matter of the following complaints made to the Board—the Canadian Manufacturers' Association, the Huntsville Lumber Co., et al, against the G.T.R. Co.; the W. Booth Lumber Co. against the G.T.R. Co.; the Winnipeg Manufacturers' Association against the C.P.R. Co. and the Canadian Northern Ry. Co.; W. J. Lovering against the G.T.R. Co.; Leak & Co. against the G.T.R. Co.; T. Dexter & Son against the G.T.R. Co.; the Boake Manufacturing Co. against the G.T.R. Co.; the Peterborough Sandstone and Brick Co. against the C.P.R. Co. and the G.T.R. Co.; the Town of Lindsay, Ont., against the G.T.R. Co., the Lindsay, Bobcaygeon and Pontypool Ry. Co. and the C.P.R. Co.; the Windsor, Essex and Lake Shore Rapid Ry. Co. against the Pere Marquette Rd. Co.; Melady & Co. against the Canadian Northern Ry. Co.; the Board of Trade of Niagara Falls re interswitching at Niagara Falls, Ont., and J. Davy against the Niagara, St. Catharines and Toronto Ry. Co. Whereas the foregoing and many other complaints have been made to the Board against various railway companies regarding the charges made for interswitching; therefore the Board, having heard the evidence adduced in support of some of the said charges—certain of the same having been allowed to stand over until the matter could be dealt with in a general manner as far as possible with the view of establishing some fixed basis for payment for interswitching services—and having fully considered the views and submissions of the various interests, and the report and recommendations of its Chief Traffic Officer, under the authority conferred upon it by the Railway Act, orders as follows:

For the interpretation, application, and operation of this Order:

1. (a) "Interswitching" shall not include the service incidental to the transfer and continuous carriage of through or interline traffic between points outside of and beyond the terminal limits hereinafter prescribed. (b) "Contracting Carrier" shall, where it is necessary, between the points of shipment and delivery, to use the line or lines of another carrier or other carriers than the carrier performing the interswitching service, include such other carrier or carriers.

2. It shall be lawful for the contracting carrier to absorb the toll charged for the interswitching of competitive traffic.

3. Upon traffic destined to consignees located upon, or reasonably convenient to, the tracks of the contracting carrier, or to consignees who have customarily accepted the contracting carrier's delivery, or which may be so consigned as not to indicate clearly the delivery required, and which subsequent to shipment is ordered by the shipper, the consignee, or the agent of either, for interswitch delivery involving an additional service by another carrier, and which is so interswitched, the contracting carrier may charge and collect, in addition to its freight charges (including back charges if any), the interswitching toll of the carrier which performs such service, which toll shall not be more than 20c. per ton for any distance not exceeding 4 miles, nor more than $3 as the minimum and $8 as the maximum per carload.

4. Upon traffic destined to consignees located upon or reasonably convenient to tracks other than those of the contracting carrier, or to consignees who have customarily required such other carrier's delivery, the contracting carrier may for the interswitching service rendered necessary for such delivery charge and collect an additional toll of not more than 10c. per ton for any distance not exceeding 4 miles, nor more than $1.50 as the minimum and $4 as the maximum, per carload; and the interswitching toll of the carrier which performs such service shall not be more than 20c. per ton, nor more than $3 as the minimum, and $8 as the maximum, per carload provided that the contracting

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carrier shall not thereby be required to reduce its revenue below $8 per carload.

5. Distance shall be computed to or from the nearest point of interchange.

6. The foregoing tolls shall include the empty movement of the car to or from the point at which it was received by the interswitching carrier.

7. Traffic consigned "to order" shall be subject to the provisions of paragraphs 3 and 4 of this order as the same may apply.

8. Traffic interswitched at the point of shipment shall be subject to clause 4 of this order, in so far as the same may be applicable.

9. The class and commodity tariffs of all railway companies subject to the provisions of the Railway Act shall show clearly and explicitly at what points and under what circumstances interswitching services will be performed, and at whose expense.

10. The tolls herein provided for interswitching service shall not interfere with or supersede any lawfully published freight rates for ordinary freight service from station to station.

11. All and every arrangement or device, such as free or assisted cartage, cartage allowances, or the like, intended to equalize the facilities of competing companies at common points, except such as are lawfully published in the freight tariffs of the companies, are hereby prohibited.

CLASSIFICATION OF ALES, MINERAL WATERS, ETC.

5023. July 7. In the matter of the application of J. Christin & Co., and other manufacturers of Montreal, for an order directing railway companies to provide a reasonable classification of mineral and aerated waters in wooden boxes, with pulp or fibreboard covers. Upon reading what has been alleged in support of the application and on behalf of the Advisory Committee of the Canadian Freight Association, and upon the report and recommendation of its Chief Traffic Officer, the Board orders that ale, beer, porter, cider, ginger ale, and mineral and aerated waters, in boxes with pulp or fibreboard covers, owner's risk of pilferage, be classified 3rd class in less than carloads, and 5th class in carloads. And the Board further orders that the classification as herein provided be included in supplement 3 to the Canadian Classification 13.

Customs Regulations for Railways.

At the recent session of the Dominion Parliament the following sections were added to the Customs Act, Revised Statutes of Canada, 1906, chap. 48:

Added at end of sec. 22: "2. The conductor of every railway train carrying freight arriving at any port in Canada from any foreign port or place, shall, at the time of making his report, if required by the officer, produce to him the way bills of all goods on board his train or true copies thereof."

Added after sec. 287, sub-sec. 2: "3. Officers of Customs examining baggage, inspectors of Customs and their assistants, and other duly accredited officials of the Department of Customs, with their baggage and their equipment, shall at all times when thereunto required by the Minister of Customs, be carried free of charge on any steamship or steamboat navigating the waters of Canada, and on any railway in Canada, provided such railway, steamboat or steamship participates in the transportation of goods in bond under Customs manifests in Canada."

The Dominion Marine Association unsuccessfully opposed the passage of the amendment.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

E. C. Adams, formerly with the Garlock Packing Co., is now representing the Anchor Packing Co., at 1001 Ford Building, Detroit, Mich.

J. J. Gartshore, Toronto, has secured an additional contract for 800 tons of 56-lb. rails for the Winnipeg city power development line to Point du Bois. The first contract was for 700 tons.

The Vulcan Iron Works, Wilkes-Barre, Pa., has issued a series of handsomely executed circulars illustrating the principal different types of locomotives they build, including light freight and passenger, freight and switching, freight and logging, logging, contractors', plantation, plantation and logging, six-driver two-wheel rear truck, and six-driver saddle tank locomotives. The circulars give very full information of dimensions, hauling capacity, etc.

The Canadian Rand Co., Ltd., Montreal, has issued a catalogue, "Compressed air appliances and uses of compressed air," which contains a large amount of information of interest and value to users of air hoists, trolleys, pile cranes, compressed air and hydro-pneumatic elevators, compressed air jacks, pneumatic rams, broaching hammers, blacksmiths' air hammers, pneumatic tools, motor hoists, riveting machines, sand blasts, air lift pumps, air compressors, rock drills, etc. The catalogue is extremely well illustrated, and contains a large amount of descriptive matter.

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British Empire Trust Co.—This is the title of a corporation formed under the British Joint Stock Companies Acts, with its head offices in London, Eng., in 1902, for the purpose of facilitating the placing of British capital in colonial securities, and to protect the interests of British investors, by acting as trustees for them and keeping them informed as to the progress of the enterprises in which their money has been invested. The company already acts as trustee for securities of the face value of £11,500,000, and among the companies for which it acts in one capacity or another are: Canadian Northern Ry., Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co., British Columbia Electric Ry., Toronto Power Co., Vancouver Power Co., Canadian Northern Prairie Lands Co. The company has issued 400,000 deferred shares of five shillings each, all of which has been paid up, and is now issuing 250,000 preferred ordinary shares of £1 each. The officers and directors are: Chairman, R. M. Horne-Payne, Chairman of the B.C. Electric Ry., and a director of the Canadian Northern Ry.; directors: U. S. Russell, director Canadian Northern Prairie Lands Co.; T. B. Brown, director B.C. Electric Ry.; Hon. M. R. Gifford, director B.C. Electric Ry., London, Eng.; W. Mackenzie, President Canadian Northern Ry.; D. B. Hanna, Third Vice-President Canadian Northern Ry., Toronto; D. N. Laurie, Halifax, N.S. Manager, J. Davidson.

The report to the effect that the Canadian Northern Ry. is about to be absorbed by one of the other transcontinental railways, has now become a "hardy annual," and has again been officially denied by the companies mentioned as being concerned.

Dominion Railway Subsidies for 1908.

The Dominion Parliament at its recent session voted subsidies in aid of railways at the rate of $3,200 a mile when the cost does not exceed $15,000 a mile, and increasing to $6,400 in proportion as the cost of construction increases. Following are the new subsidies voted:

NOVA SCOTIA.

Dominion Atlantic Ry.—From Centreville to Aylesford or Kingston or Middleton, not exceeding 35 miles.

Halifax and South Western Ry.—From Lunenburg to Bridgewater, via Upper La Have, 12 miles.

Maritime Ry. Co.—From Chignecto to Northumberland Straits, 25 miles; from Joggins Mines to the Bay of Fundy, not exceeding 1 mile.

St. Peter's to Sydney.—For a line between these points, via the south shore of Bras d'Or Lake, not exceeding 60 miles. The Cape Breton Ry., extending from Port Hawkesbury to St. Peter's has a charter covering this distance.

Tusket Wedge to Riverdale.—From Tusket Wedge to the Halifax and South Western Ry., at or near Riverdale, not exceeding 8 miles. The Tusket Wedge Ry. Co. has been incorporated by the Nova Scotia Legislature to construct such a line.

NEW BRUNSWICK.

Canadian Pacific Ry.—From Plaster Rock to Riley's Creek, 28 miles.

Centreville or Woodstock to Grand Falls.—From between Centreville and Woodstock to Grand Falls, not exceeding 25 miles.

Gagetown to Fredericton.—For a line between these points, not exceeding 40 miles.

North Shore Ry. (formerly Beersville Coal and Ry. Co.)—From Beersville to Brown's Landing, 7 miles; and a branch from the main line to Mount Carlyle, 2.50 miles.

Westfield to St. John.—For a line between these points not exceeding 14 miles.

York and Carleton Ry.—From the present terminus to the National Transcontinental Ry., not exceeding 9 miles.

QUEBEC.

Canadian Northern Quebec Ry.—From Montreal to Hawkesbury, 65 miles.

Eastern Townships Ry.—From St. Leonard's Jct., on the Intercolonial Ry., to Dudswell, 36 miles.

Great Northern Ry. of Canada.—From St. Jerome to Charlemagne (Bout de l'Islet), 22 miles. The G.N.R. of Canada is a part of the Canadian Northern Quebec Ry.

L'Avenir and Melbourne Ry.—From Melbourne to Drummondville, not exceeding 28 miles.

Montreal Northerly.—From Montreal to a junction with the National Transcontinental Ry., not exceeding 200 miles.

Northeastern Ry.—From east of Lake Temiskaming near Ville Marie, easterly, not exceeding 25 miles.

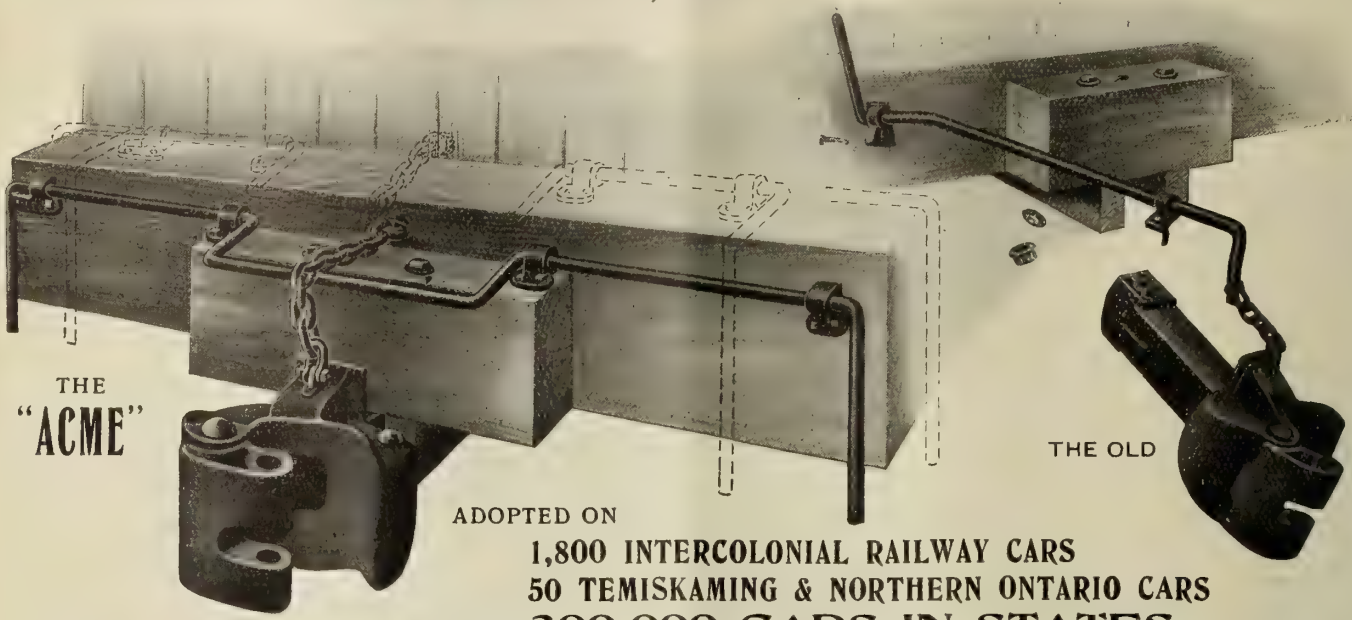
Papineauville towards Nominingue.—From Papineauville on the C.P.R., towards Nominingue, not exceeding 30 miles.

Quebec and Lake St. John Ry.—From Valcartier station to St. Catherine, not exceeding 3.8 miles; from Valcartier station towards Gosford, 5.50 miles; from the end of the 35th mile of the branch to La Tuque on the St. Maurice River, to La Tuque Falls, 5 miles; from La Tuque Falls to the mouth of the River Croche, 5 miles; from the La Tuque branch to the steamboat landing near La Tuque, not exceeding 1.6 miles; from Chicoutimi, south, or southeast, not exceeding 5 miles.

Quebec Central Ry.—From St. George to St. Justine, 30 miles.

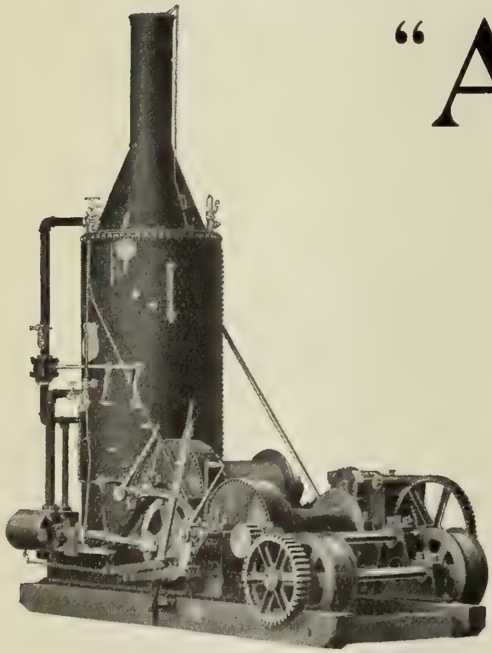
ACME RAILWAY EQUIPMENT CO.

PHILADELPHIA, PA.



ADOPTED ON
1,800 INTERCOLONIAL RAILWAY CARS
50 TEMISKAMING & NORTHERN ONTARIO CARS
300,000 CARS IN STATES

DOUBLE HANDLE CALLED FOR "Where a coupler couples by impact, but cannot be uncoupled unless the brakeman or switchman goes between, or over, or under the cars, or around the end of the train, IN ORDER TO REACH THE APPLIANCE ON THE CONNECTING CAR, such a coupling is **DEFECTIVE AND PROHIBITED BY LAW.**"—*Judge McPherson, Des Moines, Iowa.*



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ST. PAUL, U.S.A.

CHICAGO NEW YORK PITTSBURG NEW ORLEANS SAN FRANCISCO

Quebec, Montreal and Southern Ry.—From Noyan Jct. to the International boundary, eight miles; from St. Lambert to St. Constant, 15 miles.

St. Maurice Valley Ry.—From Three Rivers to St. Maurice, 28 miles.

Saguenay and James Bay Ry.—From Herbertville to St. Joseph d'Alma, 10 miles.

ONTARIO.

Algoma Central and Hudson Bay Ry.—From Michipicoten Harbor towards the National Transcontinental Ry., 50 miles.

Burk's Falls and French River Ry.—From Burk's Falls to French River, 85 miles. This company is controlled by the G.T.R.

Canadian Northern Ontario Ry.—From Sudbury Jct. to Hutton Mines, 30 miles; from Hawkesbury to Ottawa, 60 miles.

Erie, London and Tillsonburg Ry.—From Port Burwell to London, not exceeding 35 miles.

Grand Trunk Pacific Branch Lines.—From the National Transcontinental Ry. to Port Arthur and Fort William, not exceeding 220 miles.

Lac Seul, Rat Portage and Keewatin Ry.—From Kenora to the National Transcontinental Ry., not exceeding 18 miles.

Nipissing Central Ry.—From the Temiskaming and Northern Ontario Ry., near New Liskeard, to Guigues tp., Que., not exceeding 13 miles.

St. Mary's and Western Ontario Ry.—From Woodstock to Exeter, not exceeding 45 miles.

Thessalon and Northern Ry.—From Thessalon northerly, not exceeding 4 miles.

MANITOBA.

Canadian Pacific Ry.—From Winnipeg Beach, northeasterly to Gimli, 9½ miles; from Gimli to Riverton, not exceeding 25 miles.

SASKATCHEWAN.

Canadian Pacific Ry.—From Moose Jaw northwesterly, 123 miles.

ALBERTA.

Cowley to Highwood River.—From Cowley to Highwood River, not exceeding 50 miles.

MacLeod to International Boundary.—From MacLeod, via Cardston, towards the International boundary, west of range 21, 45 miles

Red Deer to Rocky Mountain House.—From Red Deer to the North Saskatchewan River near Rocky Mountain House, 70 miles

BRITISH COLUMBIA.

Carmi to Penticton.—From Carmi to Penticton, not exceeding 50 miles.

Death Rapids.—For a line around Death Rapids, not exceeding 4 miles

Esquimalt and Nanaimo Ry.—From near French Creek to Sandwich, 41 miles; from Sandwich to Campbell River, 38 miles; from Cowichan Bay to Cowichan Lake, 24 miles.

Nicola to Penticton.—From Nicola to or near Penticton, not exceeding 100 miles.

Pacific Northern and Omineca Ry.—From Kitimat to Telkwa River, 110 miles.

Vancouver and Lulu Island Ry.—From Eburne to New Westminster, not exceeding 9.65 miles.

Vancouver Island and Eastern Ry.—From the Esquimalt and Nanaimo Ry., near Campbell River, towards Fort George, on the G.T. Pacific Ry., not exceeding 100 miles.

Vancouver, Westminster and Yukon Ry.—From Vancouver towards St. George, on the G.T. Pacific Ry., not exceeding 100 miles.

The bill also provides for the granting of subsidies for railway bridge construction as follows:

Towards construction and completion of bridge and approaches over Nicolet River at Nicolet, Que., in lieu of the subsidy granted in 1907, $15,000.

To the C.P.R. (lessees of the Calgary and Edmonton Ry.), towards construction and completion of bridge over Saskatchewan River connecting Strathcona and Edmonton, Alta., 15% upon amount expended thereon, not exceeding $100,000.

To the Quebec, Montreal and Southern Ry. Co., towards construction and completion of following bridges: Across Gentilly River, $15,000; across Becancourt River, $30,000; across Richelieu River, $30,000.

To Atlantic, Quebec and Western Ry., towards construction and completion of the 26 railway bridges between Paspebiac and Gaspe, payable upon completion of railway between these points, $250,000.

To Interprovincial Railway Bridge Co. of New Brunswick, towards the construction and completion of bridge over Restigouche River from Campbellton to Mission Point, $160,000.

The Canadian Northern Ry. is given a guarantee of bonds to the extent of $13,000 a mile in respect of the construction of the following lines: From near Regina, Sask., to westerly boundary of Manitoba, there connecting with the company's line to Brandon, 152 miles. From near Saskatoon, Sask., thence southerly and westerly towards Calgary, 175 miles. From near Prince Albert, Sask., by way of North Battleford and Battleford Jct., excluding mileage between North Battleford and Battleford Jct., 132 miles. From Thunder Hill line of the company's railway at westerly boundary of Manitoba, running generally westerly towards Rosthern, 100 miles. Extension of Rossburn line from western boundary of Manitoba northwesterly, 50 miles.

The Edmonton, Yukon and Pacific Ry., which is the western extension of the Canadian Northern Ry., is also given a guarantee of bonds to the extent of $13,000 a mile for the first 50 miles, from the company's line, or on the Edmonton and Slave Lake Ry. line, at or near Edmonton, or Strathcona, Alta., westerly to the coal areas near Brazeau River, and $25,000 a mile for the remainder, not exceeding in all 170 miles. Interest on the securities to be paid half-yearly, at 3½% per annum, and principal payable in 50 years. It is also provided that the guarantee of securities shall not be given until the E.Y. & P. Ry. Co. and the Canadian Northern Ry. Co. shall have amalgamated under the name of the latter company, nor until the amalgamated company, as successor, has, as maker of such securities, become liable for payment of principal and interest.

The following are re-votes of subsidies previously granted:

NOVA SCOTIA.

Cape Breton Ry.—From Port Hawkesbury or Point Tupper, to St. Peter's, not exceeding 31 miles, in lieu of subsidy granted in 1899 for 30 miles.

Deans Settlement.—From near Deans Settlement to near Melrose, not exceeding 52 miles, in lieu in part of subsidy granted in 1906. From the Intercolonial Ry. near Dartmouth, to Deans Settlement, not exceeding 80 miles, in lieu in part of subsidy granted in 1906.

Dominion Atlantic Ry.—From Brazil Lake, on the D.A.R., to Kemptville, not exceeding 11 miles, in lieu of subsidy granted in 1900.

Inverness Ry. and Coal Co.—From Cheticamp to line already built between Broad Cove and Point Tupper, not exceeding 37 miles, in lieu of subsidy granted in 1903.

Margaree Coal and Ry. Co.—From Orangedale, on Intercolonial Ry., via the side of Lake Ainslie and Ste. Rosa, to Chimney Corner Cove, not exceeding 46 miles; and from the Intercolonial Ry. between Orangedale and Point Tupper to Caribou Cove on Inhabitant's Bay or River, not exceeding 4 miles, in lieu of subsidy granted in 1907 for 38 miles; not exceeding in all 50 miles.

New Glasgow.—From New Glasgow to Melrose, and from Melrose to Guysborough, with branch line to Country Harbor, not exceeding in all 116 miles, in lieu in part of the subsidy granted in 1906

NEW BRUNSWICK.

International Ry. of New Brunswick.—From western end of the 20 miles of its railway, already constructed from Campbellton, to the St. John River between Grand Falls and Edmundston, not exceeding 90 miles, in lieu of subsidies granted in 1903.

QUEBEC.

Atlantic, Quebec and Western Ry.—From Causapscal, on Intercolonial Ry., to Edmundston, not exceeding 160 miles, in lieu of subsidy granted in 1906.

Canadian Northern Quebec Ry.—From near Arundel to the united townships of Preston and Hartwell, not exceeding 30 miles; and for a line connecting its Montfort and Gatineau line with the main line at St. Jerome, not exceeding 15.2 miles; in lieu of subsidies granted to Great Northern Ry. of Canada in 1906; not exceeding in all 45.2 miles.

Canadian Northern Quebec Ry.—From Garneau Jct. to or towards Quebec Bridge, not exceeding 83 miles, in lieu of the subsidy granted to Great Northern Ry. of Canada in 1906 for 70 miles.

Ha Ha Bay Ry.—From Jonquieres Village to Baie des Ha Ha, via Laterrieres Village, not exceeding 24 miles, in lieu of the subsidy granted in 1906 for 20 miles.

Lotbiniere and Megantic Ry.—To extend its railway southerly from near Lyster, to or towards Lime Ridge, Dudswell, not exceeding 50 miles, and from its line in Inverness, to the bridge over the St. Lawrence near Quebec, not exceeding 30 miles, in lieu of subsidies granted in 1906; not exceeding in all 80 miles.

Matane and Gaspe Ry.—From Ste. Flavie, on Intercolonial Ry., to Matane, not exceeding 38 miles, in lieu of the subsidy granted in 1906 for 30 miles.

Quebec and New Brunswick Ry.—From Chaudiere Jct. to the International boundary, not exceeding 80 miles, in lieu of subsidies granted in 1901 for 45 miles, and in 1907 for 18 miles.

Roberval Westerly.—From Roberval westward toward James Bay, not exceeding 100 miles, in lieu of the subsidy granted in 1906.

Ste. Agathe des Monts.—From Ste. Agathe des Monts station toward Howard tp., passing near Lake St. Joseph and St. Mary southerly, not exceeding in all 15 miles, in lieu of subsidies granted in 1906.

United Counties Ry.—From Yamaska to Lotbiniere County, not exceeding 70 miles, in lieu of subsidy granted in 1903, and from Mount Johnson to St. Gregoire station, not exceeding 1½ miles, in lieu of subsidy granted in 1899 for 1 mile.

ONTARIO.

Bathurst to Sharbot Lake.—For a line between these points, via Lanark or Carleton Place, not exceeding 41 miles, in lieu of the subsidy granted in 1906.

Baptiste to Renfrew.—For a line from a point near Baptiste, easterly to a point near Renfrew, not exceeding 75 miles, in lieu of the subsidy granted in 1906.

Bracebridge and Trading Lake Ry.—For a line from Bracebridge, to a point near Baysville, not exceeding 16 miles, in lieu of the subsidy granted in 1904 for 15 miles.

THE ELECTRIC HEADLIGHT

The following letter was received under date of May 8, 1908, from Mr. J. W. Cleary, Travelling Engineer Pyle-National Electric Headlight Co.:

"I learn from ________________ the Master Mechanic here, that an engineer running between ____________ and ____________ discovered a broken rail with the Pyle-National Electric Headlight and made the stop without ditching his train. One or two pairs of wheels got off, but that was a small affair to what it would have been where a foot of the rail was broken off. Also an engineer running east of here found some cars shoved out on the main line. He saw them with the 'Electric' and made the stop without hitting them."

PYLE-NATIONAL ELECTRIC HEADLIGHT CO.
MONADNOCK, CHICAGO

THORNYCROFT AUTOMOBILES

HIGH-CLASS
CARS
ONLY
From 14 to 75 H.P.

Prices Range
from
$3,500 to
$10,000

45 H.P. Six-Cylinder Car.

MOTOR DELIVERY WAGONS, OMNIBUSES
LORRIES

SOLE SALES AGENTS FOR CANADA

POLSON IRON WORKS LIMITED, TORONTO

Manitoulin and North Shore Ry. (or to the Canada Central Ry.)—For lines from the M. and N.S.R., between Little Current and Sudbury, westerly towards the Algoma Central and Hudson Bay Ry, not exceeding 100 miles; from Little Current, thence crossing the C.P.R. near Stanley thence to Sudbury, not exceeding 64 miles; from Sudbury, northerly, not exceeding 30 miles, in lieu of subsidies granted in 1906.

Nipigon Ry.—From near Nipigon station on C.P.R., to Nipigon Lake, not exceeding 30 miles; from Nipigon Bay to the west side of Lake Helen, on line of Nipigon Ry., not exceeding 3½ miles; from the Nipigon Ry., near crossing of Fraser River to Lake Jesse, by Cameron Falls, not exceeding 1½ miles; from north shore of Lake Nipigon, northerly, not exceeding 45 miles, in lieu of subsidies granted in 1906.

Ontario, Northern and Timagami Ry.—From Sturgeon Falls, northwesterly, to the westerly shore of Lake Timagami, not exceeding 50 miles, in lieu of subsidy granted in 1906.

Owen Sound and Meaford Ry.—From Owen Sound to Meaford, not exceeding 30 miles, in lieu of subsidy granted in 1906.

BRITISH COLUMBIA.

Kettle River Valley Ry.—From Grand Forks to 50 miles up the North Fork, and East or West Fork of North Fork of Kettle River, not exceeding 50 miles, in lieu of subsidy granted in 1906.

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Great Northern Ry. Lines in Canada.

Victoria and Sidney Ry.—Extensive repairs are about to be undertaken on the line between Victoria and Sidney, B.C., the Vancouver Island portion of the Victoria Terminal Ry. and Ferry Co. Officials of the Provincial Government recently reported that the road was not safe for travel and that it would have to be repaired at once in order to ensure the continuance of its operation. F. Van Sant stated that this report was somewhat exaggerated, as while the line required repairing, it was quite capable of handling, without danger, the class of traffic offering. Large numbers of ties and quantities of other material have been collected at Victoria and Sidney, and the whole of the 20-mile stretch of line between the two points will be gone over, and thoroughly overhauled. It is also proposed to strengthen the ferry wharf at Sidney, and to place in the service a new ferry. This ferry was ordered in the United States, and was expected to be delivered in June. With the new ferry and the existing plant it is proposed to inaugurate a daily service between Sidney and different points on the Sound and the B.C. mainland. (July, pg. 481.)

Kaslo and Slocan Ry.—Owing to the unsafe condition of a number of bridges on a section of this line, it is proposed to construct a Y at McGuigan siding, thereby cutting out the train service to Sandon and Cody. The traffic in sight, the company says, does not warrant the reconstruction of the bridges. A petition has been sent to the B. C. Government, protesting against this, and asking the Government to interfere and prevent the cutting off of the train service.

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F. C. Salter, European Traffic Manager G.T.R., London, Eng., writes: "I have been a subscriber to The Railway and Marine World for a number of years and read it thoroughly, as I find it always contains living truths of Canadian doings. It gives me great help in my missionary work among Europeans, and, not the least, Britishers, as I endeavor to bring before them the glories of Canada, and the great Grand Trunk system which is welding the Dominion together."

Railway Rolling Stock Notes.

The Eastern British Columbia Ry. is reported to be arranging a contract with the American Locomotive Co. for two locomotives for early delivery.

Press reports recently stated that the Great Northern Ry. (U.S.) had placed an order for box cars with the Canada Car Co., Montreal, but we are officially advised that the reports are incorrect.

The Canadian Northern Ry., between June 15 and July 15, has received the following additions to rolling stock: 100 box cars from Rhodes, Curry & Co., Amherst, N.S.; 4 second-class coaches from the Crossen Car Mfg. Co., Cobourg, Ont.; 19 ten-wheeled and 6 consolidation locomotives from the Montreal Locomotive Works.

The Preston Car and Coach Co., Preston, Ont., between June 15 and July 17, delivered 1 second-class coach to the Temiskaming and Northern Ontario Ry.; 50 platform trucks to the Dominion Ex. Co.; 2 suburban car bodies to the South-western Traction Co., and equipped 1 second-class coach with Pintsch gas for the T. & N.O. Ry.

The Intercolonial Ry., between June 18 and July 14, has received the following additions to rolling stock: 29 all-steel dump cars from the Dominion Car and Foundry Co., Montreal; 7 box cars, 60,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; 34 box cars from other sources, and 1 consolidation locomotive from the Canadian Locomotive Co., Kingston, Ont.

The Montreal Locomotive Works is building a locomotive for the Johns-Manville Co., for use on a railway between Asbestos and Danville, Que., of which the following are the principal dimensions:

Type	0-4-0 85 class
Cylinders	16″ by 24″
Drivers	50″ diar.
Boiler	54″ outside diar.
" working pressure	180 lbs.
Firebox	72″ by 33¼″
Tubes	178—2″ diar.
" length	11′ 1″
Driving wheel base	7′ 0″
Wheel base, engine and tender	29′ 4¼″
Weight on drivers	85,000 lbs.
" of tender	48,000 lbs.
Tank capacity	2,500 U.S. gals.

Following are dimensions and special equipment of the 10 second-class vestibule sleeping cars ordered by the Intercolonial Ry., as mentioned in our July issue:

Length over buffers	71′ 7¼″
" " end sills	63′ 7″
Width over side sills	9′ 10″
Height, top of sills to under side of plate	6′ 7¼″
Length inside sheathing at floor line	62′ 8½″
Width inside truss planks	8′ 9″
" between deck rails	4′ 10″
Height inside, top of floor to under side of lower deck rail	7′ 7¾″
Outside of end sill to centre of body bolsters	8′ 0″
Centre to centre of body bolsters	5′ 0″
" " " needle beams	10′ 0″
" " " transoms	26′ 3½″
Height, top of rail to centre of coupler	2′ 10½″
Wheel base of truck	10′ 6″
End door opening	2′ 3″
Width of end doors	2′ 4″
Total wheel base	58′ 1″
Platform and buffer	Standard Coupler Co.
Couplers	Janney cast steel.
Drawbar springs	Montreal Steel Works.
Air brakes	Westinghouse automatic.
Steam Heating	Safety Car Heating and Lighting Co.
Lighting	Pintsch gas.
Journal boxes	McCord.
Side bearings	Chicago Railway Equipment Co.

Following are dimensions and special equipment of the 10 consolidation and 10 ten-wheel locomotives ordered by the C.P.R. from the Montreal Locomotive Works, for delivery in September:

	Consolidation.	10-wheel.
Weight, on engine truck	24,000 lbs.	48,000 lbs.
" on drivers	168,000 lbs.	142,000 lbs.
" total	192,000 lbs.	190,000 lbs.
Driving wheel base	15′ 10″	14′ 10″
Total wheel base, engine	24′ 4½″	26′ 1″
" " " and tender	53′ 3¼″	54′ 6½″
Cylinders	22½″ by 28″	22½″ by 28″
Valves, piston	11″ diar.	11″ diar.
Drivers diar.	58″	63″
Driving journals	Main 9½″, others 12″	Main 9½″, others 12″
Valve gear	Walschaert.	Walschaert.
Superheater	Vaughan-Horsey.	Vaughan-Horsey.
Boiler, type	Extended wagon top, radial stay.	Extended wagon top, radial stay.
Working pressure	180 lbs.	180 lbs.
Firebox	96⅝″ by 65¼″	102⅛″ by 69⅞″
Tubes	240-2″, 24-5″	240-2″, 24-5″
" length	14′ 2½″	14′ 4″
Tank capacity	5,000 imp. gal.	5,000 imp. gal.
Coal capacity	10 tons.	10 tons.
Air brakes	Westinghouse	Westinghouse
Brake beams	Simplex.	Simplex.
Couplers	Tower.	Tower.

Following are dimensions, etc., of 1 switching locomotive and 1 Pacific type locomotive which are being built by the C.P.R. at its Angus, Montreal, shops, as mentioned in our July issue:

	Switching.	Pacific.
Weight on drivers	126,000 lbs.	139,300 lbs.
Total weight	126,000 lbs.	214,300 lbs.
Cylinder, diameter	18″	21″
Piston stroke	26″	28″
Drivers, diameter	52″	69″
Boiler, type	Wagon top, radial stayed	Wagon top, radial stayed.
Working pressure	200 lbs.	200 lbs.
Heating surface, tubes	1,406 sq. ft.	2,777 sq. ft.
" " firebox	138 sq. ft.	180 sq. ft.
Tubes, number	234—2″	190—2¼″, 24—5″.
" length	11′ 6″	19′ 6″
Grate area	29 sq. ft.	45½ sq. ft.
Capacity, water	3,500 imp. gal.	5,000 imp. gal.
" coal	6 tons	10 tons.
Air brakes	Westinghouse automatic.	Westinghouse automatic and straight.
Axles	Krupp and open hearth steel.	Steel, Peech and Tozer.
Brake beams	Simplex.	Simplex.
" shoes	C.P.R. standard.	C.P.R. standard.
Couplers	Tower.	Pilot, Washburn; Tender, Tower.
Headlight	C.P.R. standard oil.	Pyle National Electric.
Journal bearings	C.P.R. standard.	C.P.R. standard.
Tyres, driving wheels	Krupp crucible.	Krupp crucible.
" tender wheels	Cast iron.	Krupp open-hearth steel.
Wheel centres	" "	Cast steel.
Superheater		Vaughan-Horsey.

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Freight Car Performances.

The American Railway Association's Committee on Car Efficiency has issued its bulletin 26 covering car balances and performances for Feb., the summary of which, so far as it affects Canadian lines, is as follows:

Revenue freight cars owned	96,660
Average number cars on line	73,817
Average foreign cars on line	20,758
Private cars on line	4,418
Total cars on line	98,993
Per cent. of cars in shop	4.60
No. of freight engines owned	2,083
Average cars per freight engine	48
Total freight car mileage	55,778,919
Average miles per car per day	19.5
Per cent. loaded mileage	77.3
Ton miles of freight, including companies' freight	816,545,984
Average ton miles, including Co.'s freight:	
Per car mile	14.6
Per loaded car mile	18.9
Per car per day	284
Gross freight earnings	$4,807,316
Average daily earnings per car owned	$1.71
Per railroad car owned	$1.75
All cars on line	$1.67

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The General Engineering and Construction Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $25,000, to conduct a general engineering, building and construction business, and to design plans and specifications, etc., for building bridges, tunnels, canals, railways, etc.

The Live Stock Shippers' Association at Winnipeg has been agitating for some time past in favor of the establishment there of a municipal stock yard. W. Whyte, Second Vice-President C.P.R., announced, July 9, that the C.P.R., the Canadian Northern Ry., and the G.T. Pacific Ry. were preparing to lay out and maintain at Winnipeg a joint stock yard as soon as the details had been worked out.

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HAMILTON, CANADA. LIMITED

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ANGLE BARS AND
TRACK SPIKES

FORGINGS—MARINE AND RAILROAD
IN ROUGH, ROUGH-TURNED OR SMOOTH FINISHED. SPECIALTY OF HEAVY FORGINGS
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are standard on the leading Railway Systems, moderate in price, minimum cost of maintenance. We are also makers of Metal Sash and Tin Barrel Spring Rollers for Passenger Car Equipment.

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SYRACUSE, N.Y., U.S.A.

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STRICTLY HIGH GRADE. TESTED & PACKED
THE KERR ENGINE CO. LIMITED
VALVE AND HYDRANT MANUFACTURERS
WALKERVILLE, ONT.

Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

4920. June 2.—Authorizing Georgian Bay and Seaboard Ry. to cross the Lindsay, Bobcaygeon and Pontypool Ry. in Lindsay, Ont.

4921. June 2.—Ordering Ottawa Electric Ry. to complete work on Somerset St. bridge within six months from date of this Order, with proviso that the company shall be at liberty to apply to the Board for a further extension of time if good reasons exist therefor.

4922. June 25.—Authorizing Windsor and Tecumseh Electric Ry. to cross two G.T.R. spurs in Sandwich East tp., Ont.

4923. June 25.—Authorizing G.T.P.R. and C.N.R. to operate trains over crossing in parish lot 120, Portage la Prairie, Man., without bringing them to a stop.

4924. June 25.—Permitting G.T.R. and C.P.R. to carry under special rate notices, certain freight traffic for delivery to them by vessel owners at Kingston, Brockville and Prescott, for transportation to Montreal, such carriage being necessary owing to interruption to navigation caused by break in Cornwall Canal.

4925. June 26.—Authorizing Erie Telephone Co. to cross G.T.R. at Talbot road, west of Jarvis, Ont.

4926. June 26.—Authorizing G.T.P.R. to carry its wires across C.N.R. at West Fort William, Ont.

4927. June 26.—Authorizing N. Watson, of Chatham, Ont., to erect wires across Pere Marquette Ry., 1 mile east of Blenheim, Ont.

4928. July 4, 1907.—Authorizing Georgian Bay and Seaboard Ry. to cross G.T.R. at Coldwater, Ont.

4929 to 4931. June 26.—Authorizing Erie Telephone Co. to erect wires across G.T.R. at Garnet, Canfield and Talbot road, 1 mile west of Canfield Jct., Ont.

4932. June 26.—Authorizing Erie Telephone Co. to erect wires across M.C. Rd. 1 mile west of Canfield Jct., Ont.

4933. June 26.—Authorizing Montreal Rolling Mills Co. to erect an automatic railway and structure supporting same, between the Co.'s works and the Lachine Canal, across G.T.R. Lachine canal branch.

4934. June 24.—Ordering that expense of maintenance and operation of interlocking plant and signal and derailing system near St. Constant, Que., be borne and paid for as follows: 42% by the Q.M. & S. R., and 58% by the C.P.R.; the Q.M. & S.R. to pay all expenses in connection with rearrangement of and additions to the plant.

4935. June 25.—Authorizing C.N.R. to construct branch line from lot 29, sec. 21, McIrvine tp., to the International boundary near Pither's Point, Ont., and from a proposed connection between the C.N.R. and Duluth, Rainy Lake and Winnipeg Rd., over certain highways in McIrvine tp.

4936. June 23.—Authorizing Sarnia St. Ry. to cross with its track and trolley wires, G.T.R. at Christina St., Sarnia, Ont.

4937. June 25.—Authorizing C.N.R. to build spur from lot 29, sec. 21, McIrvine tp., to International boundary near Pither's Point, Ont., and from a proposed connection between C.N.R. and Duluth, Rainy Lake and Winnipeg Rd.

4938. June 23.—Authorizing C.P.R. to open for passenger traffic the portion of its Pheasant Hills branch from Saskatoon to Asquith, Sask., 23 miles.

4939. June 2.—Authorizing use of additional track constructed by C.P.R. across public road at Janetville, Ont., mileage 11.7 of its line from Burketon to Bobcaygeon.

4940. June 26.—Granting leave to Erie Telephone Co. to erect wires across G.T.R. at Jarvis station, Ont.

4941. June 26.—Granting leave to Manitoba Government Telephones to erect wires across C.P.R. 2½ miles west of Glenboro.

4942. June 30.—Approving revised location of G.T P.R. from the west line, sec. 7, tp 53, range 17, west, to west line sec 31 tp 52, range 20, west 5th meridian, North Alberta, mileage 10.238 to 30.11.

4943. June 26.—Authorizing the G.T.P.R. to construct bridge over Kaministikwia River at West Fort William, Ont.

4944. June 26.—Granting leave to C.N.R. to erect telegraph wires across C.P.R. at Wanapitei, mileage 107.7 north from Parry Sound, Ont.

4945. June 30.—Authorizing Bell Telephone Co. to erect wires across C.P.R. at public crossing about 3½ miles south of St. Felix de Valois, Que.

4946. June 30.—Authorizing Bell Telephone Co. to erect wires across C.P.R. at public highway crossing ¾ mile north of G.N.R. diamond near Joliette, Que.

4947. July 3.—Authorizing Caradoc-Ekfrid Telephone Co. to erect wires across M.C. Rd. 360 yards east and 340 yards west of Melbourne station, Ont.

4948. July 3.—Approving plan of C.P.R. bridge 9.17, Nipigon section, Ont.

4949. July 3.—Authorizing New Brunswick Telephone Co. to erect wires across C.P.R. at St. Stephen, N.B.

4950. July 3.—Authorizing Bonaventure and Gaspe Telephone Co. to erect wires across Atlantic and Lake Superior Ry. 2¾ miles west of New Carlisle, Que.

4951 to 4957. Granting leave to Bolton Telephone Co. to erect wires across C.P.R. at various points.

4958. July 3.—Authorizing C.P.R. to construct 2 bridges on Sherbrooke section, 1 on Prescott branch, 1 on Newport section, 1 on Montreal and Ottawa section, 1 on Farnham section and 1 on St. John section.

4959. July 3.—Approving of deviation in location of the C.P.R. main line and double track between Kakabeka and Kaministikwia, Ont., mileage 19.46 to 23.

4960. July 7.—Authorizing C.P.R. to construct spur line to the Wapskehegan Lumber Co.'s premises, Gordon parish, Victoria County, N.B.

4961. July 7.—Authorizing municipal council of St. Anne de Beaupré, Que., to lay water pipes under Quebec Ry., Light and Power Co.'s track at nine points.

4962. July 7.—Amending order 4865, of June 2, 1908, directing C.P.R. to continue to maintain public highway crossing where its railway intersects lot official no. 138, of the Parish of Montreal, Que., between Fenwick Ave. and Crescent Ave.

4963. June 23. — Granting leave to the C.N.O.R. to erect its telegraph wires across G.T.R. north of Mount Albert, Ont.

4964. June 23.—Ordering C.P.R. to pay cost of reconstruction and strengthening of subway where its track crosses the G.T.R. main line at mile post 124.96 east of G.T.R. station, Brockville, Ont.

4965. June 23.—Approving location of Grand Valley Ry. from Brantford to Eastwood, Ont.

4966. June 24.—Ordering that all trains westbound to or beyond the Union Station, Toronto, are forbidden to cross Yonge St. and are required to stop on the east side of the said street unless they have a clearance by the semaphore standing on the west side of Yonge St., and that no engines or cars, except express cars containing fruit and the engines moving the same, be shunted across or upon Yonge St. during the seasons of open lake navigation, between 1 and 2 o'clock p.m.

4967. July 7.—Authorizing British Columbia Electric Ry. to lay its track across Front St., New Westminster, B.C., and across the C.P.R.

4968. July 2.—Authorizing G.T.R. to construct a siding to the George Matthews Co.'s premises, Peterboro, Ont.

4969. June 23.—Ordering G.T.R. to install, maintain and operate gates, semaphores and derails at crossing with Toronto Street Ry., on Front St. Toronto.

4970. July 7.—Authorizing Bolton Telephone Co. to erect wires across G.T.R. at road between concessions 6 and 7, Albion tp., Peel County, Ont.

4971. July 7.—Authorizing Peterboro Light and Power Co. to lay gas pipe under G.T.R. at Sherbrooke St., Peterboro, Ont.

4972. July 7.—Authorizing the Bell Telephone Co. to erect aerial wires across C.N.O.R. one mile east of Parry Sound, Ont.

4973. June 24.—Authorizing C.P.R., at its own expense, to construct a highway in the line and of the width of 4th St., Tillsonburg, Ont., and across G.T.R. and lands and track of the M.C. Rd.

4974. July 7.—Authorizing Bell Telephone Co. to erect wires across Q.M. & S.R., at public crossing five miles west of St. Hyacinthe.

4975 to 4979. July 7.—Authorizing Bell Telephone Co. to erect wires across C.N.O.R. at five different points in Ontario.

4980. July 7.—Authorizing Bell Telephone Co. to erect wires across M.C. Rd. at public crossing ½ mile north of Amherstburg station, Ont.

4981. July 7.—Authorizing Bell Telephone Co. to erect wires across G.T.R. at Rosebank, Ont.

4982. July 7.—Authorizing Bonaventure and Gaspe Telephone Co. to erect wires across Atlantic, Quebec and Western Ry., at public crossing ½ mile west of Paspebiac station, Que.

4983. July 7.—Approving by-law of Cumberland Railway and Coal Co., authorizing J. R. Cowans, General Manager, to prepare and issue tariffs of tolls to be charged on traffic carried.

4984. July 7.—Authorizing B. J. Carruthers, of Downsview, Ont., to place wires under G.T.R., 1¼ miles north of Downsview station, Ont.

4985. July 8.—Ordering C.P.R. to stop its passenger trains at home semaphore at the St. Jerome diamond; also C.N.R. to construct platform from point at which the C.P.R. trains stop to the diamond, and to supply proper and safe conveniences for the transfer of passengers at the point in question.

4986. June 23.—Dismissing application of C.P.R. for order directing that a case be stated for opinion of the Supreme Court, re application of the Town of Montreal West, D. S., and D. and Jessie R. Leach, of Montreal, to continue to maintain a public highway crossing where the C.P.R. intersects lot official no. 138, of official plan and book of reference of Parish of Montreal, Que.

4987. July 7.—Recommending to Governor-in-Council for approval by-laws of Quebec, Montreal and Southern Ry., excepting that portion authorizing an extra charge of 10c. over and above the regular fare, to any person failing to procure a ticket.

4988. July 8.—Fixing basis for payment for interswitching service performed by railways. This order is given in full on pg. 559.

4989. June 10.—Authorizing Canada At-

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lantic Ry. to construct spur line to the Riordon Paper Co.'s premises, Hawkesbury, Ont.

4990. July 9.—Authorizing Town of Berlin, Ont., to lay a drain pipe under G.T.R. at Wellington St., Berlin, Ont.

4991. Mar. 10.—Ordering that locomotives of every railway company subject to the legislative authority of the Parliament of Canada, be equipped with a full set of signals, to include red and white lamps, torpedoes, fusees, and red and white flags.

4992. July 10.—Approving location of Matane and Gaspe Ry. Co., between Ste. Flavie and Little Metis, Que.

4993. July 10.—Authorizing G.T.R. to install interlocking plant at its bridge over the Welland Canal, between Merritton and Niagara Falls, Ont., and that the G.T.R. engines and trains may pass over the bridge without being brought to a stop.

4994. July 10.—Approving deviation in Brantford and Hamilton Electric Ry.'s constructed line between Hamilton and Horning Mountain, Ancaster tp. and village of Ancaster, to line between Wentworth and Brant counties, Ont.

4995. July 10. — Authorizing Town of Peterboro to lay sewer pipe under G.T.R. at Park Street, Peterboro, Ont.

4996. July 9.—Authorizing Walkerton and Lucknow Ry. Co. to open for carriage of traffic, the part of its line between mileage 6.00 at Saugeen Jct., and mileage 27.5 at Hanover, Ont.

4997. July 9.—Approving location of the C.P.R. Virden-McAuley branch from mileage 16.5 to 35.4.

4998. July 9.—Authorizing C.P.R. to lay additional track across Park Ave., St. Louis, Hochelaga County, Que., on north side of the three tracks at present crossing Park Ave.

4999. July 9.—Authorizing Toronto, Grey and Bruce Ry. to open for traffic the diversions of its line from mileage 7.3 to 8, near Emery; mileage 10.8 to 13.4, near Woodbridge; mileage 15.3 to 15.5, near Kleinburg; and mileage 19.3 to 21.8, near Bolton, Ont.

5000. July 9.—Authorizing Guelph and Goderich Ry. to open for carriage of traffic the portion of its line from Linwood Jct. to Listowel, Ont., 16.1 miles.

5001. July 9.—Authorizing the St. Mary's and Western Ry. to open for traffic the portion of its line commencing at Queen St., St. Mary's, Ont., and running through St. Mary's and the townships of Blanshard, Nissouri and West Zorra, to Embro, Ont.

5002. July 9.—Authorizing the Tillsonburg, Lake Erie and Pacific Ry. to open for traffic the portion of its line from mileage 0, the connecting point of the London section of the C.P.R., to mileage 5.69, near Embro, Ont.

5003. June 15.—Authorizing New Brunswick Telephone Co. to erect wires across Temiscouata Ry. at Evanston, N.B.

5004. July 14.—Authorizing National Transcontinental Ry. to cross Tobique Valley Ry. (leased by C.P.R.) at mileage 165 west of Moncton, N.B.

5005. July 14.—Authorizing Town of Renfrew, Ont., to lay a sewer pipe under G.T.R. at Carswell St.

5006-5009. July 14.—Authorizing New Brunswick Telephone Co. to erect wires across Temiscouata Ry. at four points.

5010. July 14.—Authorizing the C.P.R. to construct a spur to the Calgary Port Huron Co.'s premises, Calgary, Alta.

5011. July 14.—Authorizing Bell Telephone Co. to erect wires across Schomberg and Aurora Ry. at Main St., Schomberg, Ont.

5012. July 14.—Authorizing New Brunswick Telephone Co. to erect wires across Temiscouata Ry. at road to Riviere du Loup, mileage 41.71.

5013. June 3.—Ordering C.P.R. to place and maintain an electric bell on Main St., Almonte, Ont., and to bond its railway track for 1,200 ft. westerly from Main St., and for 400 ft. easterly from Main St.; to maintain an automatic electric bell at Bridge St.; to bond its track to the west of Bridge St., half way to Main St., also to construct a subway to carry Little Bridge St. on its present line through and under its tracks, to bear all compensation for land affected, and to remove Reid & Williams' buildings; also ordering town of Almonte to pay the C.P.R. $2,000 on Dec. 1, 1908, and on the same date one-quarter of the amount allowed the owner of the buildings after deducting amount, if any, realized by the railway company for the sale of the buildings.

5014-5015. July 15.—Authorizing New Brunswick Telephone Co. to erect its wires across C.P.R. near McAdam Jct. and at Edmundston, N.B.

5016. July 14.—Authorizing C.P.R. to reconstruct bridge 26.73, Sault Ste. Marie branch, Ont.

5017-5018. July 14.—Authorizing C.P.R. to reconstruct bridges 115.4 and 132.5, Cranbrook section, B.C.

5019. July 14.—Authorizing G.T.R. to deviate its siding to the Lehigh Portland Cement Co.'s premises, Thurlow tp., Ont.

5020. July 14.—Ordering that crossing of Intercolonial Ry. by National Transcontinental Ry. in Levis County, Que., be protected by interlocking plant.

5021. July 7.—Ordering C. N. Ry. to erect and maintain a station at Denholm, Sask.

5022. July 7.—Approving supplement 3 to Canadian Freight Classification 13, subject to certain conditions

5023. July 7.—Ordering that ale, beer, porter, cider, ginger ale, and aerated and mineral waters, in boxes with pulp or fibreboard covers, be classified 3rd class in less than carloads, and 5th class in carloads.

5024. July 7.—Approving supplement to C.P.R. Standard Freight Mileage Tariff C.R.C. no. E1, filed as supplement 1 to C.R.C. E1164, applying to local freight tariff on St. Mary's and Western Ontario Ry., Walkerton and Lucknow Ry., and Listowel branch of Guelph and Goderich Ry., to be operated as portions of the C.P.R., Ontario Division.

5025. July 14.—Authorizing C.P.R. to take additional lands along its railway in Mountain village to enable it to construct a ditch along its right-of-way.

5026. July 15.—Recommending to the Governor-in-Council for sanction and approval: 1. Conveyance, dated Jan. 1, 1908, by Galt, Preston and Hespeler St. Ry. Co. to Berlin, Waterloo, Wellesley and Lake Huron Ry. Co. 2. Conveyance dated Jan. 1, 1908, by Preston and Berlin St. Ry. Co. to Berlin, Waterloo, Wellesley and Lake Huron Ry. Co. 3. Lease, dated Jan. 1, 1908, from Berlin, Waterloo, Wellesley and Lake Huron Ry. Co. to the C.P.R. Co.

5027. June 30.—Authorizing C.P.R. to construct spur to Riley and Julian's premises on its Lac du Bonnet branch, Man.

5028. July 16.—Authorizing Dominion Natural Gas Co. to lay a main under G.T.R. in Woodhouse tp., Norfolk County, Ont.

5029. July 16.—Ordering G.T.R. to refund to the Montreal Lumber Co., Ltd., at Ottawa, $332.07, amount of overcharge on lumber between Brule Lake and Ottawa.

5030-5032. July 16.—Authorizing Bell Telephone Co. to erect wires over G.T.R. and M.C. Rd., at Essex, Branchton and Woodstock, Ont.

5033. July 17.—Authorizing C.P.R. to open for traffic its double track from Raleigh to Tache, mileage 15.1 to 28.1 from Ignace, Ont.

5034. July 17.—Authorizing V.V. & E.R. & N. Co. to construct a portion of a branch line from west limit of Huntingdon townsite, B.C., through the townsite to the International boundary line.

5035. July 14.—Authorizing Ontario Power Co. to erect wires across G.T.R. near Welland, Ont.

5036. July 17.—Authorizing C.P.R. to construct a spur line to the Cochrane Brickyards Co.'s premises, Cochrane, Alta.

5037. July 14.—Dismissing application of Town of Napanee, Ont., for order directing G.T.R. and B. of Q.R. to provide protection at Centre St., known as Selby Rd. and Thomas St.

5038. July 14.—Confirming interim order 4985, July 8, 1908, directing C.P.R. to stop its trains at home semaphore at St. Jerome diamond, and ordering C.N.Q.R. to construct a platform from point at which its trains stop to diamond, and to supply conveniences for transfer of passengers to the C.N.Q.R.'s passengers trains.

5039. July 17.—Authorizing Victoria Terminal Ry. and Ferry Co. to construct bridge over Nicomekl River, B.C.

5040. July 17.—Authorizing Victoria Terminal Ry. and Ferry Co., to construct bridge over Serpentine River, B.C.

5041. July 14.—Authorizing C.P.R. to take additional lands adjoining its railway, Albion tp., Peel County, Ont.

A Railway to Hudson's Bay.

Contrary to general expectation the Dominion Government did not make any definite declaration of policy in regard to the construction of a railway to Hudson Bay, before the close of the recent session of Parliament. The supplementary estimates passed contained an item of $100,000 for the making of a survey for the line, and in connection with the passing of this vote, the Minister of Railways said, July 11, that the line would be constructed without delay. The $100,000 which had been voted would be expended in making a survey of the country through which the line would pass. Whether the road would be constructed by the Government or not would depend upon the result of that survey. The Government had not reached any decision on that point. This statement confirmed a remark the Minister made in a speech at Galt, Ont., June 29, and repeated in the House of Commons in answer to a question July 7.

The extension of the boundaries of Manitoba to Hudson Bay, introduces a new feature into the question, as it is that province which is most directly interested in the construction of the line.

Some negotiations have taken place between the Dominion Government and Mackenzie, Mann & Co. (Ltd.) with respect to the construction of the line, and it is stated that this company desires a subsidy of between $10,000 and $15,000 a mile for the extension of the line it has completed to the Pas, Sask., to Hudson Bay. The estimated cost of the line is placed at $30,000 a mile. Advocates of government ownership take the ground that a line of this character should be constructed and owned by the Government, but that any other line in Canada should be permitted to connect with it and have running powers over it. (July, pg. 493).

Owing to an extensive forest fire along the old Drummond County Ry., the Intercolonial Ry. stations at Carmel, Davelnyville and Lavergne, Que., were destroyed July 11, in addition to 80 freight cars and large numbers of telegraph poles and ties.

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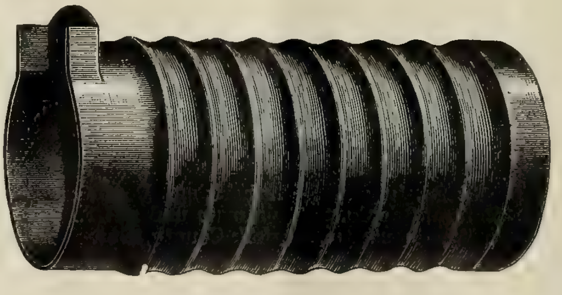

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MAINLY ABOUT PEOPLE.

J. P. Purdy, local agent Oshawa Electric Ry., Oshawa, Ont., died June 19.

W. B. Ogden, of New York, brother of I. G. Ogden, Third Vice-President C.P.R., died there July 5, aged 67.

C. M. Hays, Second Vice-President and General Manager G.T.R., has taken a cottage at Cushing's Island, Me.

Wm. C. Ross, mechanical foreman Intercolonial Ry., Richmond, N.S., died there after a short illness July 15.

W. Downie, General Superintendent Atlantic Division C.P.R., is spending a short holiday in British Columbia.

Miss M. V. Smith, only daughter of J. M. Smith, Comptroller Toronto Ry., was married in Toronto, July 14, to F. B. Follett.

J. R. Booth, a director of the G.T. Pacific Ry., Ottawa, has been elected Honorary President of the Canadian Lumbermen's Association.

F. Gelinas, who was Secretary of the Dominion Department of Public Works from 1900, died suddenly at his residence, Ottawa, July 2, aged 38.

R. W. Perks, a member of the Imperial Parliament, and one of the directors of the Montreal and Georgian Bay Canal, has been made a baronet.

W. J. Mulvihill, foreman of a G.T.R. bridge gang, was struck by some falling girders at Lindsay, Ont., July 14, and died in a few minutes.

G. Clarke, Secretary-Treasurer North Shore Power Ry. and Navigation Co., Clark City, Que., has been appointed a magistrate for the Saguenay district.

Hon. M. E. Bernier, Deputy Chief Railway Commissioner, is one of the largest stockholders in the Bank of St. Hyacinthe, Que., which recently became insolvent.

John Neilson, Toronto, who began railway work in 1856, and who has been with the C.P.R. since 1883, as a locomotive engineer, retired from active work June 30.

J. G. Scott, ex-General Manager Quebec and Lake St. John Ry., has been elected Honorary President Lake St. Joseph Aquatic Association, Lake St. Joseph, Que.

H. J. Parkhill, Chief Dispatcher Canadian Northern Ry., North Battleford, Sask., died there recently. He was formerly in the C.P.R. dispatching office at Calgary, Alta.

C. B. King, Manager London St. Ry., London, Ont., was successfully operated on for appendicitis July 16, and we are advised that he is recovering very satisfactorily.

J. W. Leonard, General Manager C.P.R. Eastern Lines, has taken a house on Cote St. Antoine Rd., Westmount, Montreal, and his family have removed there from Toronto.

Among recent additions to the list of subscribers to the Quebec Battlefields Fund are: Sir Thos. G. Shaughnessy, $250; R. B. Angus, $250; C. R. Hosmer, $250; C. M. Hays, $250.

W. H. Allison, one of the C.P.R. trick dispatchers at Toronto, who has been in the company's service for a number of years, has at his own request been retired under the pension rules.

Jos. Barton, car inspector for the Intercolonial Ry., Moncton, N.B., died at Cobourg, Ont., June 24, where he had been engaged in inspecting cars under construction at the Crossen Car Manufacturing Co.

G. M. Thomas, Travelling Passenger Agent Intercolonial Ry., Toronto, was presented with a cabinet of silver by the transportation officers of the city, on the occasion of his recent marriage to Miss A. Ellis.

The engagement is announced of Miss A. Tiffin, daughter of E. Tiffin, General Traffic Manager Intercolonial Ry., Moncton, N.B., to E. O. Schleuter, of Preston, Ont. The marriage will take place in Sept.

G. D. Maxfield, who has been appointed General Agent, Passenger Department, Wabash Rd., at Buffalo, N.Y., at one time travelled in Canada for the Santa Fe Rd., having his headquarters in Detroit, Mich.

Jas. Lynch, baggage master at the C.P.R. Union station, Ottawa, retired from the company's service June 25, after 27 years' work. He is taking up his residence on a farm he has acquired in Saskatchewan.

C. C. Chipman, Chief Commissioner Hudson's Bay Co., Winnipeg, accompanied by Mrs. Chipman, Miss Chipman, and H. Chipman, sailed from Montreal, July 3, on the Allan Line s.s. Virginian for Liverpool.

Sir C. Rivers Wilson, President G.T.R., and Lady Rivers Wilson, were present at the Tercentenary celebration at Quebec. During his visit to Canada Sir Charles will make a trip of inspection over the G.T.R.

Miss L. Hanson, daughter of E. Hanson, Montreal, who is on the directorate of a number of transportation companies, was married to Angus, son of Dr. A. A. Macdonald, of Toronto, at Montreal, June 27.

D. D. Hay, who died at Stratford, Ont., recently, was one of the original promoters of the Wellington, Grey and Bruce Ry., now part of the G.T.R., and constructed some sections of the line in the vicinity of Listowel, Ont.

F. C. Foy, ticket agent New York Central Lines, Toronto, who has recovered satisfactorily after an operation for appendicitis, left New York, July 16, on the s.s. Cedric for England. He hopes to return to duty by Sept. 1.

H. H. Brewer, who has been appointed Superintendent Lake Superior Division, G.T. Pacific Ry., was formerly Superintendent of Terminals, G.T.R., Toronto, and latterly has been in the Great Northern Ry.'s service at St. Paul, Minn.

H. Holgate, C. E., Montreal, has been appointed to represent the Intercolonial Ry. in an arbitration to decide whether or not a classification should be made in the standing of freight clerks, and a general increase of salaries granted.

E. M. Jelly, son of J. Jelly, roadmaster at Ottawa, and H. F. Cole, son of J. F. Cole, train dispatcher at Ottawa, have won the two science scholarships at McGill University, Montreal, offered by the C.P.R. annually to its employes' sons.

J. A. Goodsell, Travelling Passenger Agent Union Pacific Rd., and Southern Pacific Rd., Toronto, was presented with a dining-room suite by the passenger representatives of the different railways in Toronto, on the occasion of his marriage, July 9, to Miss K. A. Ferguson.

J. A. Mitchell, Locomotive Foreman G.T.R., Stratford, Ont., was presented with a mantel clock by the employes at the roundhouse, and with a cut glass water set by the local branch of the Brotherhood of Engineers, on leaving Stratford to enter the G.T. Pacific Ry. service.

Among the later subscribers to the Quebec Battlefields Fund are the following: G.T.R., $5,000; G. W. Stephens, Chairman Montreal Harbor Commission, $1,000; Sir H. Montagu Allan, $250; Canadian Fairbanks Co., $25; F. Barlow Cumberland, Vice-President Niagara Navigation Co., $10.

J. F. Thallon, Commissioner for the Queensland Government Railways, and an old-time friend of D. McNicoll, Vice-President C.P.R., has recently been spending some time in Canada investigating the system of railway management, with a view of adapting it to the needs of the railways under his charge.

W. H. Rosevear, ex-General Car Accountant G.T.R., was the principal guest at a dinner given by the General Association of Transportation and Car Accounting Officers, at its summer meeting at Niagara Falls, Ont., June 28. He subsequently left on an extended trip to British Columbia and California.

Geo. Wheler, chief clerk of the Registrar-General's Department, Toronto, who died there July 5, in early life was a contractor on the old Midland Ry., now part of the G.T.R. He had as one of his sub-contractors W. Mackenzie, of Mackenzie, Mann & Co., who was then starting out in railway construction work.

J. R. Gilliland was presented with an oak smoking cabinet by the C.P.R. general office staff, and with a silver tea service by the C.P.R. terminal employes, at St. John, N.B., June 27, on relinquishing the position of agent at West St. John, on being promoted to the superintendency of the company's Montreal terminals.

Sir Sandford Fleming, in offering to present the city of Halifax with about 80 acres of land on the western side of the northwest arm of the harbor as a public park, has made it a condition that a tower in commemoration of the 150th anniversary of the establishment of parliamentary institutions in the province be erected.

Fred. Cumberland Salter, whose appointment as European Traffic Manager G.T.R., and Canadian Ex. Co., with office at Liverpool, Eng., was announced in our July issue, was born at Sarnia, Ont., Aug. 31, 1863, and entered railway service in 1882, under F. W. Cumberland, General Manager Northern Ry. of Canada, subsequently serving in various capacities with the G.T.R., Erie Rd., and Northern Pacific Ry.; leaving the last mentioned company when General Eastern Agent, to re-enter G.T.R. service in Europe.

Four members of the Canadian Railway Club have been elected presidents of important transportation organizations as follows: H. H. Vaughan, Assistant to Vice-President C.P.R., Montreal, President American Railway Master Mechanics' Association; J. H. Callaghan, General Storekeeper C.P.R., Montreal, President Railway Storekeepers' Association; W. J. Camp, Electrical Engineer C.P.R., Montreal, President Association of Railway Telegraph Superintendents; J. Powell, chief draughtsman Motive Power Department G.T.R., Montreal, President Association of Railway Club Secretaries.

B. W. Greer, who recently resigned the position of General Freight Agent, C.P.R. Pacific Division, at Vancouver, to enter another business, has been paid a unique compliment by a committee of his fellow-citizens. A petition has been forwarded to Sir Thos. G. Shaughnessy, dilating on the personal feelings always existing between them and Mr. Greer, and concluding: "We therefore respectfully venture to request that if it be at all possible, Mr. Greer's services be retained in connection with your freight department here, and ask that your board will give the subject most favorable consideration."

Ernest Alexander, whose appointment as Assistant Treasurer of the C.P.R. was announced in our last issue, was born in Yorkshire, Eng., Dec. 8, 1862, and commenced his railway career in 1882 as private secretary to the Superintendent of the Southern Division, G.T.R., and remained in that position until the abolition of the general offices of the company at Hamilton early in 1893; on Mar. 1, 1893, he took service with the C.P.R. as Secretary to the President, Sir William C. Van Horne, and on the retirement of Sir William from the presidency in 1899 he remained in the same capacity with Sir Thomas G. Shaughnessy, which position he held until his present appointment.

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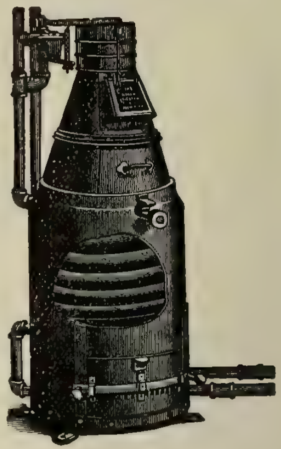

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WORKS & OFFICE - - - ST. THOMAS, ONTARIO

Jas. E. Hutcheson, Superintendent and Purchasing Agent, Ottawa Electric Ry., whose portrait appears on the first page of this issue, was born at Brockville, Ont., Sept. 15, 1858. He entered railway service in 1874 in the G.T.R. mechanical department, afterwards serving in that company's ticket, freight and telegraph departments. In 1884 he was appointed a C.P.R. train dispatcher at Ottawa, and in 1886 was made Chief Dispatcher, and in 1888 Trainmaster, which position he held until 1891, when he took charge of the Ottawa Electric Ry. Co.'s operation. He has taken an active part in the Canadian Street Railway Association's work for several years, having served as a member of the executive committee, as Vice-President, and at the recent annual meeting he was elected President.

W. D. Reid, who has been elected President Reid Newfoundland Co., was born in Australia, Mar. 20, 1867, and came to Canada with his parents in 1871. Educated in the public schools, and at the Collegiate Institute, Galt, Ont., he became associated with his father, the late Sir Robt. G. Reid, in some of his C.P.R. contracts, and subsequently undertook some contracts on his own account on the C.P.R. Algoma branch, and on the Intercolonial Ry. from Hawkesbury to Grand Narrows, N.S. He joined his father in the latter's enterprises in Newfoundland, and from 1890 had practically full charge of the work in the island. When the Reid Newfoundland Company was formed in 1902, he was elected Vice-President, and appointed General Manager, which positions he held until his election to the Presidency.

G. H. Daniels, who died at Lake Placid, N.Y., July 1, aged 66, commenced his railway career on the North Missouri Rd., now part of the Wabash system, in 1857, but it was not until 1872, when he was appointed General Freight and Passenger Agent of the Chicago and Pacific Ry., that his real railway career commenced. In 1880 he became General Ticket Agent of the Wabash, St. Louis and Pacific Rd., now the Wabash Ry., and after occupying that position for two years, filled positions with various traffic associations until 1889, when he was appointed General Passenger Agent New York Central and Hudson River Rd. In that capacity he carried out an advertising campaign which made the line and his name known throughout the world. He was relieved of the heavier responsibilities of the passenger department in 1905, and resigned from active service in May, 1907.

J. K. McNeillie, who has been appointed Superintendent, district 1, C.P.R., Toronto, was born there Feb. 23, 1874, and entered railway service in 1890, his record being: May to July, 1890, call boy and clerk in stores department, G.T.R., Lindsay, Ont.; July, 1890, to Nov., 1891, apprentice G.T.R. roundhouse, Lindsay,; Nov., 1891, to Sept., 1896, apprentice, locomotive fitter and machinist, G.T.R. shops, Point St. Charles, Montreal; Sept., 1896, to Nov., 1897, clerk in Superintendent and Trainmaster's office, C.P.R., Farnham, Que.; Nov., 1897, to Nov., 1899, chief clerk in Superintendent's office, C.P.R., Farnham, Que.; Nov., 1899, to May, 1900, clerk in General Superintendent's office, C.P.R., Winnipeg; May, 1900, to July, 1902, chief clerk in same office; July, 1902, to Mar., 1903, Car Service Agent C.P.R., Winnipeg; Mar., 1903, to Oct., 1907, in Car Service Department, C.P.R., Montreal, in charge of the distribution of passenger equipment; Oct., 1907, to June, 1908, Assistant Superintendent of Terminals C.P.R., Toronto.

D. I. Roberts, who has been appointed General Manager Quebec, Montreal and Southern Ry. and Napierville Jct. Ry., was born at Waynesburg, Pa., June 27, 1853, and entered railway service April, 1873, since which his record has been: April, 1873, to Mar., 1874, clerk General Freight Agent's office, Pittsburg, Cincinnati and St. Louis Rd., Pittsburg, Pa.; Mar., 1874, to Feb., 1876, chief clerk car service department, same road; July to Oct., 1877, travelling freight agent, same road; Oct., 1877, to June, 1884, freight and ticket agent, same road, at Washington, Pa.; June, 1884, to May, 1885, travelling passenger agent, Pennsylvania lines; May, 1885, to April, 1886, District Passenger Agent, Pittsburg, Cincinnati and St. Louis Rd., and Chicago, St. Louis and Pittsburg Rd., Columbus, Ohio; April, 1886, to Oct., 1890, Assistant General Passenger Agent, Pennsylvania lines west of Pittsburg, at Cincinnati, Ohio; Oct., 1890, to Dec., 1891, Assistant General Passenger Agent, New York, Lake Erie and Western Rd., Chicago, Ill., in charge of all passenger business west of Buffalo and Salamanca, N.Y., including the Chicago and Erie Rd; Dec. 7, 1891, to 1901, general passenger agent, New York, Lake Erie and Western Rd., and its successor the Erie Rd.; 1901 to 1905, Vice-President Little Kanawha Rd., and President Marietta, Columbus and Cleveland Rd.; from 1905 to Jan. 1, 1908, Mr. Roberts was not in railway service, from which latter date to July 20 he has been General Canadian Freight and Passenger Agent, Delaware and Hudson Co., Montreal, and General Freight and Passenger Agent Quebec, Montreal and Southern Ry., and Napierville Jct. Ry.

Central Railway of Canada.

Press reports announced recently that a contract had been awarded to the Dominion Engineering and Construction Co., Ltd., of which Randolph Macdonald, of Toronto, is President, for the construction of the Central Railway of Canada. As a matter of fact, the contract was signed a year ago, to go into effect as soon as the railway company could make the necessary financial arrangements, but the matter has remained in abeyance on account of the financial stringency. Press reports state that 5% first mortgage bonds to the value of £2,350,000, to be issued to the public at 96, have been underwritten in England. We have not received any official confirmation of this, but have been advised from a reliable source that a portion at least of the bonds have been underwritten. The Hon. A. Campbell, of West Toronto, Ont., President of the company, left for England, July 25, in connection with its affairs. Surveys for the line were made by J. M. Shanly, C.E., of Montreal, some two or three years ago. We are advised that there is a probability that construction will be started this year.

The company was originally incorporated in 1903, as the Ottawa River Ry. Co., with an authorized capital stock of $500,000, to construct and operate a railway from Grenville to Montreal, via the counties of Argenteuil, Two Mountains, Laval, and Jacques Cartier, with branch lines from St. Andrew's to St. Côme, up the Riviere Rouge to Lake Rouge, and to connect with the Canada Atlantic Ry. at Hawkesbury. Power was granted to issue securities to the extent of $20,000 a mile, and to enter into agreements with the Jacques Cartier Union Ry., Canada Atlantic Ry., Carillon and Grenville Ry., Central Counties Ry., Great Northern Ry. of Canada, C.P.R., G.T.R., Chateauguay and Northern Ry., Montreal Park and Island Ry., and Montreal Terminal Ry. The company was also empowered to utilize waterpowers, etc., for the use and transmission of electric power for its railway; to acquire hotels, parks, etc.; to construct and operate telegraph and telephone lines; to build docks, dockyards, wharves, warehouses and other terminal facilities on navigable waters, for vessels and elevators, and to own and operate steam and other vessels on navigable waters which are reached or connected with by its railway. In 1904, the company was granted additional powers, to extend its railway from Grenville to Ottawa; to issue bonds to the extent of $30,000 a mile of the railway constructed or under contract; to make agreements with the Montreal and Northern Ry., Irondale, Bancroft and Ottawa Ry., Central Ontario Ry., and G.T. Pacific Ry.; and the time within which construction was to be completed was extended. In 1905 the name was changed from the Ottawa River Ry. Co. to the Central Ry. Co. of Canada, and further additional powers granted; to extend the proposed line from Ottawa to Georgian Bay at Midland, Ont., passing through the counties of Russell, Carleton, Lanark, Frontenac, Lennox and Addington, Renfrew, Hastings and Haliburton, and Muskoka and Parry Sound districts; to enter into agreements with the Ottawa Valley Ry., Ottawa River Ry., and Quebec Southern Ry.; and a further extension of time was granted within which construction was to be commenced and completed. In 1906, an act was passed to increase the capital stock to $10,000,000; empowering the issue of bonds upon terminal properties at Owen Sound, Midland, Stratford, London, St. Thomas and Toronto, confirming the agreements for the purchase of the Ottawa River Ry., for 2,000 fully paid-up shares in the company, and for the purchase of the Carillon and Grenville Ry.; declaring the undertaking to be for the general advantage of Canada, and extending the time for the construction and completion of the project.

The company bought the Ottawa River Navigation Co.'s property, including the Carillon and Grenville Ry., but it is said that only a portion of the purchase price has been paid. It is also reported to have obtained an option on the Irondale, Bancroft and Ottawa Ry.

Recent Dominion Legislation.

Among the acts passed at the recent session of the Dominion Parliament to receive the Royal Assent July 20, were:

Alberta and British Columbia Ry.—Act of incorporation.

Canada Shipping Act.—Amendments.

Canadian Northern Ry.—Aids for extension.

Dry Docks.—To encourage construction.

Edmonton, Yukon and Pacific Ry.—Aids for extension.

Grand Trunk Pacific Ry.—Guarantee of bonds.

Grand Trunk Ry.—To authorize sale of portion of Major's Hill Park, Ottawa.

Hamilton, Waterloo and Guelph Ry.—Amending act of incorporation.

Lake Champlain and St. Lawrence Ship Canal Co.—Amending act of incorporation.

Manitoba Grain Act.—Amending same.

Niagara, St. Catharines and Toronto Ry.—Amending act of incorporation.

Prince Edward Island Ry.—To authorize construction of branch line from Harmony, on Souris branch, to Elmira.

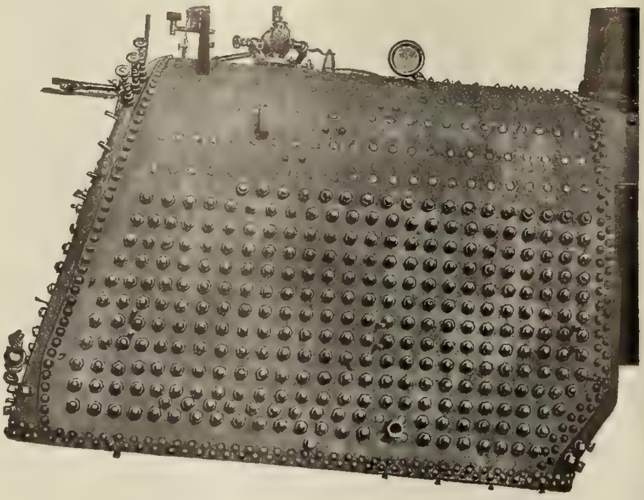
Quebec Bridge and Ry. Co.—Respecting property of the company.

Railway Act.—To amend same as respects constitution of Board of Railway Commissioners.

Railway Act.—To amend same with respect to telegraphs and telephones, and the jurisdiction of the Board of Railway Commissioners.

Telegraph Service.—To assist in maintaining an independent and efficient service.

The C.P.R. has arranged to have branches of the Railway Y.M.C.A. started at Chapleau and Schreiber, Ont., divisional points on its Lake Superior Division.



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TORONTO, CANADA, AUGUST, 1908

Canadian Association of Masters and Mates.

Grand Master, Capt. J. H. McMaugh, Toronto, Ont.; Grand Secretary-Treasurer, Capt. H. O. Jackson, 376 Huron St., Toronto.

◆

Canadian Car Service Bureau.

Eastern Lines—Chairman of Executive Board, A. S. Hobson, Sherbrooke, Que.; Manager, J. E. Duval, 121 Board of Trade, Montreal.

Western Lines—Manager, H. R. Patriarche, 101 Bon Accord Building, Winnipeg.

British Columbia Lines—Manager, E. J. Travers, Nelson, B.C.

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Canadian Freight Association.

President, J. F. Chapman, Deseronto, Ont.; Sec.-Treas., T. Marshall, Toronto.

Official Organ.—The Railway & Marine World, Toronto.

Western Lines Freight Inspection Bureau—President, G. H. Shaw; Manager and Sec.-Treas., H. R. Patriarche. Office, 101 Bon Accord Building, Winnipeg.

British Columbia Lines Freight Inspection Bureau—Manager, E. J. Travers, Nelson, B.C.

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Canadian Railway Club.

President, L. R. Johnson, Montreal; Secretary, J. Powell, St. Lambert, Que.

Meetings at Windsor Hotel, Montreal, 1st Tuesday of each month, 8 p.m., except June, July and August.

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Canadian Street Railway Association.

President, J. E. Hutcheson, Ottawa; Sec.-Treas., Acton Burrows, 157 Bay St., Toronto.

Official Organ.—The Railway and Marine World, Toronto.

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Canadian Society of Civil Engineers.

President, J. Galbraith, Toronto; Secretary, C. H. McLeod, Montreal.

Meetings at 877 Dorchester St., Montreal, every alternate Thursday, 8 p.m.

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Canadian Ticket Agents' Association.

President, C. R. Coleman, Truro, N.S.; Sec.-Treas., E. de la Hooke, London, Ont.

Official Organ.—The Railway and Marine World, Toronto.

Central Railway and Engineering Club of Canada.

President, W. R. McRae; Secretary, C. L. Worth, 409 Union Station, Toronto.

Meetings at Rossin House, Toronto, 3rd Tuesday each month, except June, July and August.

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Dominion Marine Association.

President, A. A. Wright, Toronto; Sec.-Treas., F. King, Kingston, Ont.

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Eastern Canadian Passenger Association.

Chairman, F. E. Barbour, Montreal; Secretary, G. H. Webster, 54 Beaver Hall Hill, Montreal.

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President, J. G. Sing, C.E., Toronto; Secretary, A. B. Wolsley, C.E., Toronto. Rooms, 96 King St. West, Toronto.

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International Water Lines Passenger Association.

President, C. A. Jaques, Montreal.
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Quebec Transportation Club.

President, E. A. Evans; Secretary, A. H. Davis, Box 324, Quebec.

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President, H. A. Allan, Montreal; Manager and Secretary, T. Robb, 526 Board of Trade, Montreal.

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The Governor-General has approved of revised regulations, being "General Instructions to Employes of the Passenger Department of the Intercolonial and the Prince Edward Island Railways," and under the provisions of chap. 36 of the Revised Statutes, ordered that they be put in force.

C. M. Hays, Second Vice-President and General Manager G.T.R., is reported to have told Alderman Dagenais, Chairman of the Montreal City Council Hygiene Committee, recently, that the G.T.R. would endeavor to arrange for the preparation of a special place at Bonaventure station for the storage of milk, and would also see if anything could be done so that cars could be cooled while milk is in transit. This latter is a difficult matter to deal with.

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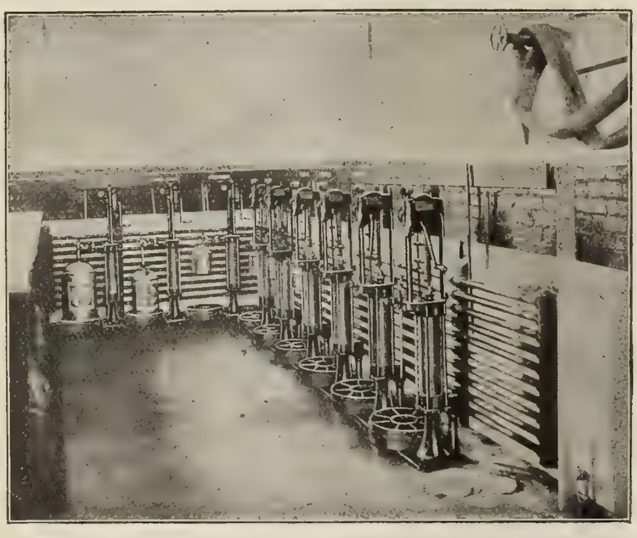

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PROPRIETORS

ARTHUR M. GRANT,
MANAGER

TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Bay of Quinte Ry.—D. A. Valleau, heretofore Assistant Superintendent, having been appointed Superintendent of the Oshawa Ry. (electric), the position vacated on the B. of Q.R. is not being filled for the present at least.

Canadian Pacific Ry.—H. E. Suckling's appointment as Treasurer was announced in our last issue. Sir Thos. G. Shaughnessy's circular announcing it says: "H. E. Suckling has been appointed Treasurer of the company, succeeding W. Sutherland Taylor, who at his own request, has been relieved from the duties of the office that he filled most satisfactorily during a long period of years."

C. A. Laberge has been appointed town ticket agent at St. John's, Que., vice L. N. Hebert.

J. K. McNeillie, heretofore Assistant Superintendent of Terminals, Toronto, has been appointed Superintendent District 1, Ontario Division, vice W. K. Thompson, transferred. He will also have charge of Toronto terminals. Office, Toronto.

W. K. Thompson, heretofore Superintendent District 1, Ontario Division, has been appointed Superintendent District 3, vice J. R. Nelson transferred. Office, Toronto.

T. Grimes, heretofore yardmaster West Toronto, has been appointed General Yardmaster, Toronto terminals, with general supervision over yard and transfer work, and such other duties as may be assigned to him.

J. R. Nelson, heretofore Superintendent District 3, Ontario Division, with headquarters at Toronto, and acting Superintendent District 2, with headquarters at London, has been appointed Superintendent District 2, vice C. Murphy, promoted. Office, London, Ont.

J. T. Trueman has been appointed town ticket agent at Midland, Ont.

J. H. Munro has been appointed Locomotive Foreman at Muskoka, Ont., the divisional point on the new line between Bolton Jct. and Romford Jct.

R. R. Jamieson, General Superintendent, Central Division, Winnipeg, having been granted six weeks' leave of absence, he is relieved by J. T. Arundel, Superintendent District 2, Pacific Division; D. C. Coleman, Superintendent District 3, Pacific Division, being temporarily transferred to District 2, and F. Walker, Chief Train Dispatcher Nelson, B.C., acting as Superintendent District 3, Pacific Division.

C. A. Cotterell has been appointed Chief Train Dispatcher, District 5, Central Division. Office, Saskatoon, Sask.

A. Price, General Superintendent Western Division, Calgary, Alta., having been granted leave of absence, J. Brownlee, Superintendent District 4, is acting as General Superintendent; and E. L. Chudleigh, Trainmaster, Cranbrook, B.C., is acting as Superintendent, District 4.

G. B. Coombe has been appointed Travelling Passenger Agent, with headquarters at Calgary, Alta.

A. R. Owen, heretofore General Traffic Agent for Japan at Yokohama, has been appointed Agent at Shanghai, China, vice J. Rankin, transferred.

J. Rankin, heretofore Agent at Shanghai, China, has been appointed Agent at Kobe, Japan, vice H. T. Wilgress, transferred to Yokohama office.

The above transfers of Messrs. Owen, Rankin and Wilgress to their former positions were made in consequence of W. T. Payne's return to Yokohama as Manager of the Trans-Pacific Steamship Line.

Duluth, Rainy Lake and Winnipeg Ry.—M. A. Murphy is reported to have been appointed General Manager with office at Virginia, Minn.

G.T. Pacific Ry.—H. H. Brewer has been appointed Superintendent, Lake Superior Division, with headquarters at Westfort, Ont.

Grand Trunk Ry.—N. Dore, son of J. H. Dore, G.T.R. agent at Mitchell, Ont., has been appointed as one of the company's assistant travelling auditors.

W. Hamilton, heretofore Locomotive Foreman, Palmerston, Ont., has been appointed Locomotive Foreman, Stratford, Ont., succeeding J. A. Mitchell, resigned to enter G.T. Pacific Ry. service.

I. Jefferis has been appointed acting Locomotive Foreman at Palmerston, Ont., vice W. Hamilton, transferred.

Pennsylvania Rd.—L. J. Fox, heretofore chief clerk to Division Freight Agent, Pittsburg, Pa., has been appointed Canadian Freight Agent, vice W. H. H. Willis, promoted. Office, Traders Bank Building, Toronto.

W. H. H. Willis, heretofore Canadian Freight Agent, has been appointed District Freight Solicitor, vice J. E. Weller, promoted. Office, Bessemer Bldg., Pittsburg. Pa.

Quebec, Montreal and Southern Ry.—Napierville Jct. Ry.—D. I. Roberts, Canadian General Freight and Passenger, Agent Delaware and Hudson Co., and General Freight and Passenger Agent Quebec Montreal and Southern Ry. and Napierville Junction Ry., has also been appointed General Manager Quebec, Montreal and Southern Ry. and Napierville Jct. Ry., vice C. B. Hibbard, resigned to engage in service with another company.

Quebec and Lake St. John Ry.—J. G. Scott, General Manager and Secretary, having resigned, the position of General Manager has been abolished.

W. H. Moore, Secretary Canadian Northern Ry. Co., has also been appointed Secretary Q. and L. St. J.R. Co.

Wabash Rd.—D. O. Ives having resigned to accept service elsewhere, W. C. Maxwell, heretofore Assistant General Traffic Manager, has been appointed General Traffic Manager.

G. D. Maxfield, heretofore District Passenger Agent Indianapolis, Indiana, has been appointed General Agent Passenger Department, with jurisdiction over New York State except New York City. Office 287 Main St., Buffalo, N.Y.

J. J. Mossman, heretofore General Agent at Buffalo, remains there as General Agent in charge of operating and freight matters.

◆

The House of Commons passed resolutions, June 25, with respect to the salaries of Deputy Ministers and other civil servants, which were subsequently incorporated in an act respecting the Civil Service. The resolutions provide that the salary of the Deputy Minister of Railways and Canals may be $8,000 a year, while those of the Deputy Ministers of other departments, excepting Justice (which is placed at $7,000 a year), Finance and Agriculture, may be $5,000 a year.

During May, 22 men were killed and 31 injured while engaged in railway work in Canada. Of the fatal accidents, 9 were due to being run over by trains, 3 each to dynamite explosions and being swept away by floods, 2 each to being caught between cars and to falling material, and one each to a collision, to a fall and to heat prostration. Of the non-fatal accidents, 7 each were due to collisions and to falls, 5 to derailments, 2 each to being struck by trains, to machinery, to blasting, to scalding by steam, and to falling material, and one each to being caught between cars, and to being run over.

Quebec and Lake St. John Ry.

Following are extracts from the report for the year ended Dec. 31, 1907, presented at the annual meeting July 9:

The total mileage operated during the year was:

	Miles.
Main line, Quebec to Roberval	189
Eastern extension, Chambord to Chicoutimi	51
Roberval to Government wharf	1
Total	241

And the mileage under construction and completed since the close of the fiscal year was:

From Jeannotte to La Tuque	40
From Valcartier towards Gosford	5½
Total	286½

The gross earnings and expenses compare as follows:

	1906.	1907.
Passenger earnings	$179,067	$195,179
Freight	369,843	406,737
Mails	13,417	14,456
Express, telegraph, parlor and sleeping cars	15,156	17,254
Car rental, etc., etc	24,593	23,076
Canadian Northern Ry., rental of offices	398	380
Canadian Northern Ry., share of maintenance, Rivière à Pierre Jct	1,065	1,114
Quebec dock receipts	4,210	4,927
	$607,749	$663,123
Expenditure	409,449	499,796
Net earnings	$198,300	$163,327

The number of passengers carried during the year was 361,100, against 325,639 in 1906. The average earnings per passenger were 56.4c., against 57.6c. in 1906. The number of tons of freight carried was 366,557, against 367,879 in 1906, and the average earnings $1.13½ a ton, against $1.01½ in 1906. The train mileage was 452,307 miles, against 379,469 in 1906. The freight was divided as follows:

Cars. 1907		Tons. 1907
1435	Cordwood	28,700
2514	Pulpwood	50,280
4255	Sawn lumber	106,140
478	Square timber	
574	Ties	
1586	Pulp and paper	181,437
138	Brick and stone	
59	Cheese	
382	Grain	
6587	General merchandise	
18008		366,557

Whilst there was an increase in gross earnings of $55,374, or 9.11%, the net earnings decreased $34,973, or 17.63%, due chiefly to the increased cost of labor and fuel, and in the increased cost of materials required for maintenance and operation. The pay lists for the year were $213,920 against $177,172 in 1906, an increase of 20.74%. This company, in common with other companies, was compelled to raise its scale of wages to all employes, and whilst it is not expected that ordinary labor will become much cheaper during the next fiscal year, it has been found possible to effect considerable economies in administration since the close of the present fiscal year by working in closer conjunction with the Canadian Northern Quebec Ry., the result of which will no doubt be apparent in the next annual report.

The increase of 35,460 in the number of passengers carried is gratifying; and in view of the increase of population along the railway, and the development of industries in various districts served by it, there is every reason to hope that the increase will continue. It is also reasonable to anticipate an even greater popularity for the Province of Quebec among tourists and sportsmen. The Tercentenary celebrations this year will do more to advertise the country adjacent to the railway than any other event since the enterprise was projected, and the directors are fully alive to the opportunities thus created for an expansion of traffic.

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MONTREAL.

With regard to freight business, there is a decrease in the number of cars of pulpwood carried, and an increase in shipments of pulp and paper. The decrease in pulpwood was merely incidental to market conditions, which led to many paper mills in the U.S. being temporarily closed. This has produced some effect upon the movement of general freight, such as supplies for men engaged in pulpwood operations. The increase in the shipments of pulp and paper is partially due to the establishment of new mills at St. Raymond and Jonquière. In all respects the relation of the company to the pulp and paper industries is exceedingly favorable. The U.S. is the largest consumer of pulpwood and its products. In that country the rapid diminution of the supply of timber has seriously alarmed the public, as well as those engaged in the business, and the territory served by the railway is more and more looked to as the source of supply for the U.S. paper market. The construction of the La Tuque branch line furnishes an admirable instance of the development of the timber resources of Northern Quebec. The water-power on the St. Maurice River at La Tuque, which is capable of developing 80,000 h.p., has been acquired by a powerful syndicate of U.S. paper manufacturers, who have also purchased 158,000 acres of the land granted your company, and have undertaken to erect mills and works for utilizing the timber grown upon that large area of land. By agreement with the syndicate the railway company will get the benefit of the carriage of their output for a period of years The La Tuque branch brings into commercial utility the whole of the region of the Upper St. Maurice River, with its numerous tributaries and water-powers, and the directors look for rapid increase of business in this direction. Already a flourishing town has been established at La Tuque, and, as the National Transcontinental Ry. crosses the St. Maurice at this point, and a physical connection has been made by it with your railway, the construction of that railway will furnish, for some time to come, much profitable traffic to your company. The development at La Tuque is likely to be repeated at other points on the railway, as various U.S. capitalists are in negotiation over pulpwood areas, and new industries are projected at Metabetchouan, Ouiatchouan and Chicoutimi. The diminution of the world's supply of pulpwood has led to a much more careful policy of cutting the timber than prevailed a few years ago. It has been demonstrated that, with judicious cutting, the same territory is again soon available for further cutting. The exploitation of pulpwood territory, therefore, means permanent industry and population, and therefore, continued revenue for the railway.

There is a steady increase in the amount of business derivable from the colonization of the Lake St. John region, and the repatriation of French-Canadians who migrated to the New England States, has been considerably accelerated by the unfavorable industrial conditions which have prevailed there. The Dominion Government is continuing its policy of encouraging settlement of the rich lands around the lake, and a proposed extension of the line from Roberval will, if carried out, not only produce considerable additional traffic for the railway arising from the development of agriculture over a wider area, but will bring into business large additional areas of timbered lands, and will also secure better means of access to the mining districts around Lake Chibougamoo, of the wealth of which the reports of the Quebec Government agents are exceedingly favorable.

The net earnings for the fiscal year were $163,326.99, and the fixed charges $209,337.34, showing that the net earnings fell short of the fixed charges by $46,010.35. This is partly due to the fact that whilst the interest on the prior lien bonds, amounting in principal to £150,000, representing the amount expended in the construction of the La Tuque branch, is charged to net earnings for the fiscal year, the branch was not operated by your company, and therefore no revenue appears in the statements under review. As previously stated, however, the directors anticipate with confidence a profitable return from the construction and operation of this branch.

The officers and directors for the current year are: President, D. B. Hanna; Vice-President, Z. A. Lash, K.C.; Secretary, W. H. Moore; other directors: L. W. Mitchell, J. D. Morton, F. C. Annesley, A. J. Mitchell, F. Nicholls, Toronto; Hon. J. Tessier, E. Beaudet, Quebec; J. G. Garneau, Mayor of Quebec, ex-officio; G. Tanguay, M.P.P., and Hon. P. A. Choquette, representing the Quebec Government, and Mr. Justice Gagne, Chicoutimi, representing that municipality. The only changes on the board are the substitution of L. W. Mitchell and J. D. Morton, of Mackenzie, Mann & Co.'s Toronto staff, for G. LeMoine and J. T. Ross, of Quebec. Last year there were two vice-presidents, G. LeMoine and Z. A. Lash. This year Mr. Lash is the only Vice-President. J. G. Scott, General Manager and Secretary, having resigned, the position of General Manager has been abolished, and W. H. Moore, Secretary of the Canadian Northern Ry. Co., etc., has also been appointed Secretary of the Q. & L. St. J. Co.

Signal Outfits for Locomotives.—The Board of Railway Commissioners has passed the following order: "In pursuance of the powers conferred upon it by secs. 30, 268, and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf, the Board orders that the locomotive engines of every railway company subject to the legislative authority of the Parliament of Canada, operating a railway by steam power, be equipped with a full set of signals, to include red and white lamps, torpedoes, fusees, and red and white flags, such equipment to be kept in good order, and to be always available and ready for immediate use. That every such railway company disobeying or failing to comply with the provisions of this regulation be liable to a penalty of $25 for every such disobedience or failure to comply with the provisions of this regulation."

T J. Wall has been appointed Travelling Passenger Agent, C.P.R., St. Louis, Mo., succeeding W. S. Merchant, resigned. Office at 725 Olive St.

The C.P.R., between June 15 and July 22, ordered the following rolling stock: 10 ten-wheel passenger and freight locomotives, and 4 single-truck snow plows, at its Angus, Montreal, shops; and 10 ten-wheel, and 10 consolidation locomotives at the Montreal Locomotive Works.

The Randolph Macdonald Co., Ltd., Toronto, has secured a contract for dredging and constructing a breakwater at Cobourg harbor, Ont., principally to accommodate the car ferry steamboat, Ontario No. 1, which the G.T.R. runs between Cobourg and Charlotte, N.Y. The work is estimated to cost about $150,000.

The C.P.R., between June 15 and July 22, received the following additions to rolling stock: 2 Pacific locomotives, 7 sleeping cars, 9 first-class cars, 11 baggage cars, 6 mail and express cars, 1 baggage and smoking car, 267 box cars and 1 ballast trimmer, from its Angus, Montreal, shops; and 9 Hart ballast cars from the Dominion Car and Foundry Co.

Interstate Commerce Commission Decisions.

Jones Bros. Co., a corporation with its principal office in Boston, Mass., recently made a number of complaints to the Interstate Commerce Commission alleging overcharges on shipments of building granite from Barre, Vt. All the cases have been decided in complainants' favor as follows:

Aug., 1907, shipment one carload to Bushwick Junction, Long Island, N.Y., over Central Vermont Ry., Montpelier & Wells River Rd., New York, New Haven & Hartford Rd., and Long Island Rd. Car was assessed at 20c. per 100 lbs. upon a minimum carload weight of 40,000 lbs., and freight charges of $80 were paid. The car was less than 36 ft. long, carried an actual weight of 32,900 lbs., and should have been assessed at $65.80. The complainant has therefore sustained damages in the sum of $14.20, which it is entitled to recover from defendants, with interest from Sept. 1, 1907.

Aug. 12, 1907, shipment one carload to same destination by same route as above. Car was assessed on minimum carload weight of 40,000 lbs., at 20c. per 100 lbs., aggregating $80. The car was less than 36 ft. long, and the actual weight of the contents was 30,600 lbs. Freight charges should therefore have been assessed at $61.20, and complainant has suffered damage of $18.80, which it is entitled to recover, with interest from Sept. 1, 1907.

Oct., 1907, shipment one carload to Scranton, Pa., over Central Vermont Ry., Montpelier & Wells River Rd., and Delaware & Hudson Co. Freight charges assessed at 17c. per 100 lbs. on a minimum carload weight of 40,000 lbs., an aggregate sum of $68, which was paid by complainant. The car was less than 36 ft. long, and carried 39,400 lbs. The freight charges should have been $66.98, an overcharge of $1.02, which complainant is entitled to recover, with interest from Nov. 1, 1907.

Dec. 12, 1907, shipment one carload to Chesaning, Mich., over Montpelier & Wells River Rd., Boston & Maine Rd., C.P.R., and Michigan Central Rd. Car was assessed at less than carload rate of 29c. per 100 lbs. and complainant compelled to pay as freight $75.60. Contents of car weighed 26,100 lbs., and the car, which was less than 36 ft. long, should have been assessed at carload rate of 21c. upon a 30,000-lb. minimum, or $63. Complainant has therefore been overcharged $12.60, which it is entitled to recover, with interest from Jan. 1, 1908.

Dec., 1907, shipment one carload to same destination and by same route as last case mentioned above. Car contained an actual weight of 31,900 lbs., but was assessed upon a minimum of 40,000 lbs., at a rate of 20c., aggregating $80, which complainant paid. Car was less than 36 ft. long, and freight should have been charged upon actual weight, but at rate of 21c. per 100 lbs. The charges should have been $66.99, and complainant has been overcharged $17.01, which it is entitled to recover, with interest from Jan. 1, 1908.

G. L. Courtney, C.P.R. District Freight and Passenger Agent, Victoria, B.C., has resigned to enter private business. We were advised, July 27, that no appointment had then been made to fill the vacancy.

The Montreal Board of Trade's Transportation Bureau will be put in operation on Sept. 1. The Board's Council has appointed as Chief of the Bureau W. S. Tilston, who for the past two years has been chief clerk to the C.P.R. Import Freight Agent at Montreal, and who was previously chief clerk to the G.T.R. Division Freight Agent at Toronto.

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Railway Storekeepers' Association.

At the recent convention held in Chicago, J. Oborne, General Superintendent Ontario Division, C.P.R., contributed the following paper:

The real purpose of the stores department is:

To keep one month's supply of staple articles required by every branch of the railway on hand.

To keep a ledger account of the supplies issued to each consumer.

To see that consumers are not given more than a sufficient quantity for one month's consumption without receiving a satisfactory explanation, approved of by a responsible officer.

To make a careful examination of all supplies received from manufacturers, or others; check the quantity or weight with the invoices, and satisfy themselves that the quantity of the goods are up to the standard charged for.

To see that supplies are unpacked and shelved immediately on receipt, and that proper care is taken of all perishable or breakable supplies.

To see that regular monthly requisitions are filed on regular dates, and that all emergent requisitions are filled on date of receipt.

To have travelling inspectors to see that supplies issued to local stores and to consumers are properly cared for, and that waste and misappropriation are avoided.

J. Shaw, Assistant Electrical Engineer, C.P.R., read a paper on "Caring for Electrical Supplies and Material."

Lincoln Smith, formerly Superintendent C.P.R. Upper Lakes Steamship Service, was presented with a purse of gold and a gold locket, and Mrs. Smith with a set of china, on their departure from Owen Sound for Montreal, where he has been assigned other duties in the C.P.R. service.

The C.P.R. is arranging to begin work on laying out the fishery reserve on the Cowichan River, Vancouver Island. The work to be done this season includes the cutting of a trail from Sahtlam to the head of the stream, and the construction of a simple suspension bridge across the river at Duncans.

The bill introduced by Senator Casgrain to amend the Railway Act by restoring the status of bonds to the position held prior to 1903, when they ranked as a first claim against railway property, in preference to claims for operating expenses, etc., was "killed" July 3, the motion that the committee rise without reporting progress being carried.

The Supreme Court has decided that the Ottawa Northern and Western Ry. has fulfilled the conditions under which the Pontiac and Pacific Junction Ry., and the Ottawa and Gatineau Valley Ry., had been granted an exemption from taxation for a period of years by the city council of Hull, Que. The city contended that the O. N. and W. Ry., which was a merger of the two companies named, had never fulfilled the conditions, and claimed $1,555.93 as taxes and interest for 1904-05 and 1905-06. The decision just given confirms that of the lower courts.

The West Kootenay Power and Light Co., which was incorporated by the B.C. Legislature in 1897, is making an issue of £240,000 of 6% first mortgage bonds, due 1940. The prospectus states that the C.P.R., realizing the great value of the water powers controlled by the company, and that in the near future it would require a large amount of power for its mountain line, has purchased a large interest in the company. The directors include C. R. Hosmer, director C.P.R., and W. R. Baker, Secretary and Assistant to President C.P.R.

Prince Edward Island Tunnel.

The House of Commons recently directed the making of a return showing all the correspondence, etc., connected with the proposal to construct a tunnel between the mainland in New Brunswick and Prince Edward Island. In the course of the discussion it was stated that some years ago Sir Douglas Fox estimated the cost of a tunnel at $10,000,000, and in 1906 he wrote to Rev. Father Burke, to the effect that since he reported on the tunnel many devices had been introduced for reducing cost and it would now be possible to materially reduce that estimate. The Government had not done anything to test the feasibility of the tunnel. At the end of the season of 1907 the Minister of Finance promised that surveys would be made, but nothing had been done.

An estimate of the cost of the construction of a tunnel was obtained by A. A. Lefurgey, M.P., from H. B. Reed, one of the engineers in charge of the construction of the East River tunnel, New York. This estimate was based on the information collected by the Department of Railways and the maps, etc., on file in the Department, and was for a single track tunnel, the distance from portal to portal being 7½ miles. In the course of his letter Mr. Reed said:

"It seems that the safest and most practical way to execute this work, located as it is, nearly 160 ft. below mean high water, would be by the shield method, with shields so designed as to be able to cope with the difficulties likely to arise in an undertaking of this nature and magnitude. I do not mean to say that should the excavations be found to be of such a nature that the full hydrostatic pressure would be encountered at any point under the straits, the shield or any method of timbering would be of much use, for in that event at that depth it would be impossible for men to work in the air pressure required. The approximate estimate of cost is based, therefore, on the assumption that the materials to be excavated will be found practically impermeable to water, and on the use of hydraulic shields, with the cast iron concrete tube type of construction, and is as follows:

"For 7½ miles of tube, 18 ft. inside diameter, thoroughly waterproofed, including duct, banks, drains and track.......	$12,950,000
"For 2 permanent shafts with pumps and chambers for ventilation and pumping apparatus......................	650,000
"Total for tunnel and shafts complete..................	$13,600,000

"Before the final method of construction is adopted, I would suggest that you take up for consideration the feasibility of building the tunnel on the bed or bottom of the straits in very much the same manner as the Harlem River section of the New York subway was built, and the Detroit River tunnel, now being constructed between Detroit and Windsor. By this method the tubes are built in sections on shore, floated into position and lowered to their resting place, previously prepared, on the river bottom, after which the sections are bolted together and calked by divers, and the final work of the interior finish done under compressed air. Should it be found that this method could be used there would be no question as to the success of the project, and the work being done for a reasonable price, for the greatest depth at which the tunnel would be placed would probably be not more than 90 ft. below mean high water, that being a safe depth at which men can work under pressure."

The Premier pointed out that the Government had placed in service between the Island and the mainland a succession of steamers, each better than the preceding one, and was preparing to replace the present steamer by a still better one. While this would be to a certain extent an experiment, it was hoped it would fill the requirements. Of course all would agree that no boat would be as satisfactory as a tunnel, which could be used under all weather conditions and through which trains could be run on schedule time. (June, 1907, pg. 409, and May, 1907, pg. 327).

The Canadian Freight Association held its summer meeting at Cushing's Island, Me. There were about 85 in the party, including ladies, most of them leaving Montreal July 14, at 8 a.m., by special G.T.R. train, arriving at Portland in the evening and from thence by ferry to the Ottawa House, Cushing's Island. On July 15, meetings of the freight classification and executive committees were held in the morning, the general meeting being held in the afternoon, after which there was a baseball match, won by the eastern men. On July 16, the party had an electric car ride round Portland and suburbs, looked over the G.T.R., Boston & Maine, and Maine Central Terminals, a sail round the bay and a clam bake at Long Island. On July 17, they left Portland in the morning by Maine Central Rd., having luncheon at Fabyan, N.H. It was intended to ascend Mount Washington, but this part of the programme was abandoned, owing to the hotel having been burned down, Montreal was reached in the evening, via C.P.R.

The C.P.R., it is reported, has plans prepared for the erection of houses to cost from $3,000 to $4,000, to meet a demand that has grown up in Vancouver, B.C.

Capt. Morden, of the Morden Lumber Co., who recently completed 50 years of service on the lakes, has retired. He was born at Uxbridge, Ont., Aug. 1, 1837, and sailed, 50 years ago, on the schooner Alice Grover, of which vessel he subsequently became captain.

The action of the Turbine Steamship Co. against the owners of the Knapp roller boat, for damage caused to the s.s. Turbinia, when the roller boat broke from its moorings in Toronto bay some time ago and collided with the Turbinia, was dismissed at Toronto, July 15, for want of prosecution.

The Grand Trunk Pacific Town and Developing Co. has been granted a license to carry on business in British Columbia, under the Provincial laws. The company's head office is in Montreal, and it has a capital of $5,000.000. Its office in British Columbia is at Victoria, E. V. Bodwell being its attorney.

The Lyall-Mitchell Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $250,000, and office at Winnipeg, to carry on the business of contractors for all kinds of work. The provisional directors are: P. Lyall, P. Lyall, Jr., Montreal; G. A. Mitchell, J. A. M. Aikins, and J. McCrea, Winnipeg.

Returns recently presented in the House of Commons showed that there were 7,054 tons of 80-lb. steel rails lying along the line of the Intercolonial Ry., all of which, except 2,500 tons delivered in the fall of 1907, had been delivered in the winter of 1906-07. On Dec. 31, 1907, there were 51 locomotives out of service, eight being small ones awaiting repairs; four had been out of service since 1906, and the remainder going out of service during 1907. Of the 12 heavy power locomotives awaiting repairs, three had been out of service since 1906, and two others over a year. On the eight light locomotives and 12 heavy ones repairs had been commenced, and in addition there were 31 locomotives in the shops which had been undergoing repair for periods running up to a year and nine months.

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British Columbia Electric Ry.—Good progress is being made with the grading on the 12 mile section of the Chilliwack line, now under construction between New Westminster and Cloverdale, B.C. The steel rails for the track have been ordered in Great Britain, and the first consignment of 2,000 tons is expected in Vancouver by Oct., by which time the grading on to Cloverdale should be completed.

All obstacles have now been set aside, says the Monetary Times, in connection with the reclamation of 30,000 acres of land on the Sumas prairie. The work will be undertaken by a company subsidiary to the B.C. Electric Ry. Co., and will cost $995,000, according to the estimate prepared. The B.C.E.R. line, which has already been commenced, will run through this land, which should be very fertile. This company is extending its lines all over the lower mainland, and the advantage of rapid and frequent transportation will encourage settlers to take up small holdings. These are now being advertised in England by the company, and the incoming of settlers who will adopt agriculture, will develop a resource which has long remained latent, but in which there are great possibilities.

The company is building a bandstand at Kitsilano Beach, and is arranging to carry out some additional second-track construction on Harris St., and Boundary Ave., in order to improve the service. The electrification of the line from New Westminster to Eburne will, it is stated, be started early in August. Negotiations are in progress with representatives of Point Grey municipality for a franchise for a line. A draft agreement is to be prepared, based on agreements with other municipalities, and discussed at a future meeting. (July, pg. 507.)

Calgary.—The City Engineer of Calgary, Alta., is preparing to ask for tenders for the laying of rails on Eighth Ave., from Third St. East to Fourth St. West, and along First St. West under the subway, the work to be done at the same time as the street paving of this portion of the city is being done. He was also instructed to revise the regulations previously adopted regarding the construction of a street railway in the city with a view of advertising for tenders.

The route of the proposed line as finally agreed upon is as follows: Ninth Ave. from Fifteenth St. East, near Cushing's factory, to Sixth St. East, then north to Eighth Ave. Eighth Ave. West to Mewata Park at Eleventh St., with double track from Fourth St. East to Fourth St. West; Eleventh St. West, south to Seventeenth Ave; Seventeenth Ave., from Eleventh St. West to Second St. East; Second St. East, from Seventeenth Ave. North to Eighth Ave.; Ninth St. West, from Eighth Ave. to the pumping station, near Louise Bridge; First St. West, from Eighth Ave. to Tenth Ave., under the subway. The total length will be about 7½ miles, which will form the main system, and it was further decided that upon its completion the following extensions would be constructed as required: (1) A belt line across Louise Bridge and around over Crescent Heights to the Langevin Bridge, and up Fourth St. East to the main line on Eighth Ave. (2) Third Ave., from Louise Bridge to Fourth St. East. (3) East of Elbow along Macleod trail and out to the abattoir and cement works. (4) First St. West, and out to Mission Bridge. (5) Twelfth and Fourteenth Avenues.

The specifications agreed upon include the use of 80-lb. rails on the principal streets; 70-lb. rails on the outlying streets; iron posts for carrying the overhead work on Eighth Ave., and cedar posts elsewhere. The rails and ties are to be laid on six inches of cement. It is likely that iron ties will be used for the Eighth Ave. track.

The special railway committee of the city council has had under consideration a proposal from the Montreal Engineering Co. to build and operate a street railway in Calgary. The company asks for a 25-year franchise, and the right to sell its surplus power. After considerable discussion, the following resolution was passed July 17: That the committee recommends that the proposition of any company applying for a franchise be considered, but in no case for more than 15 years; that the city would require a percentage of the profits after a period to be arranged, and have the option of purchase at the expiration of the franchise.

The proposal of P. A. Rodrique, to construct a line in the city, is not being given any further consideration. (June, pg. 431.)

Edmonton.—The whole question of the operation of the street railway under construction in Edmonton, Alta., is expected to come up for discussion at an early date. Owing to the recent tightness in the money market the financing of the completion of the line met with a check, and the starting of a car service was put off indefinitely. Several offers have been received from English and other companies for a franchise to operate the line, but nothing has been decided on. (June, pg. 431.)

Galt, Preston and Hespeler Ry.—Press reports state that surveys have been made for the construction of an extension of this line from Berlin, via Puslinch Lake to Guelph, Ont. (July, pg. 509.)

We are advised that the company has no intention of making any extension this year.

Hamilton Street Ry.—The negotiations between the city council committee and the street railway management respecting a new agreement are practically complete. The final draft of a new agreement which is being drawn up provides for a considerable amount of reconstruction of roadbed, the substitution of 80 and 94-lb. rails for lighter ones now in use, and for some additional lines. (July, pg. 509.)

Hamilton, Waterloo and Guelph Ry.—An act authorizing the company to increase its bonding power to a maximum of $37,500 a mile has been passed by the Dominion Parliament. (July, pg. 509.)

Hull Electric Co.—The agreement between the company and the city council of Hull, Que., respecting the double-tracking of the company's lines was signed July 8. The work was reported to be well advanced July 15. (July, pg. 509.)

Montreal and Southern Counties Ry.—We are advised that an agreement has been entered into between the company and the G.T.R., for the operation of its cars over the Victoria Bridge across the St. Lawrence. The present intention is that the north driveway of the bridge shall be utilized for the tracks, which will connect with the G.T.R. yards at Point St. Charles, for delivery of freight to Montreal. As to the progress of construction we are advised that the steel work has been put on the Blacks (swing) bridge on the Lachine Canal for reinforcing, and that the feeder cables have been laid under the canal. Access to the Victoria Bridge will be made over the Harbor Commissioner's property. It is hoped to have the line between Montreal, the entrance to which city has been arranged by by-law 376, and Longueuil, in operation at an early date. This section will be of 6.3 miles, and the cars will be operated by a 600 volt direct current. The total length of line in the city will be 1,600 ft., over portions of Common, Grey Nun, and Youville streets, on which the agreement provides for a single track with turnout and switches as the engineers may stipulate. The lines which it is proposed to construct first south of the bridge will have a length of 24 miles. The first of these will be to Longueuil, another will be from St. Lambert to the Chambly district, and a third from St. Lambert towards Huntingdon. (July, pg. 509.)

Montreal Park and Island Ry.—The Montreal City Attorney has expressed an opinion to the effect that the company's cars had no legal right to enter the city, and that no extra charge should be levied when passengers were transferred to cars going to wards which had recently been annexed to the city. On this opinion instructions have been issued to the City Clerk to see that the company's cars do not enter the city, and that the Montreal Street Ry. extend its lines into all the new wards that have been annexed to Montreal. (July, pg. 509.)

Montreal Street Ry.—The Superior Court has given a decision in the case of the Montreal Harbor Commissioners against the M.S.R. Co., and the City of Montreal, defendant in warranty, which has been before the courts for six years. The city council gave the M.S.R. Co. permission to lay its tracks on Commissioner St., and the tracks were laid there. The Harbor Commissioners sought an injunction, but this was refused, and an action in warranty was taken. By the decision the M.S.R. Co. is ordered to remove its tracks within two months, and the city ordered to pay the costs on account of its having given permission for the laying of the tracks on what has been found to be the Harbor Commissioner's property. (April, pg. 283.) See also Montreal Park and Island Ry.

Morrisburg Electric Ry.—An act was passed last session of the Ontario Legislature incorporating a company with this title to construct an electric railway from Morrisburg, through Williamsburg, Winchester, Chesterville, and Morewood to Russell, with a branch line to Winchester Village. It is reported that negotiations are in progress for the obtaining of franchises from the municipal councils of the district. This is a revival of a charter granted by the Ontario Legislature in 1902. (April, pg. 283, and June, 1902, pg. 143.)

Niagara, St. Catharines and Toronto Ry.—Surveys are being made at Welland, Ont., for an extension to connect with the Toronto, Hamilton and Buffalo Ry., and the Michigan Central Ry., in that town. The company's line at present ends at the river bank, and it will be necessary to construct a bridge to carry the extension across. (July, pg. 509.)

North Midland Ry.—It is reported that A. E. Welch has completed arrangements in London, Eng., for financing the construction of this projected railway between London and Stratford, Ont., via St. Mary's, and that an announcement will shortly be made as to the date when construction will be started. (July, pg. 509.)

Ottawa, Brockville and St. Lawrence Ry.—See under Railway Development.

Ottawa Electric Ry.—Arrangements are being completed for the erection of an extra barn adjoining the present one on Albert St. The proposal to extend the line to the cemetery is under consideration, and the company offers to meet the wishes of the city council in this respect if the city will provide a free right-of-way and grade the line. The city desires that the company

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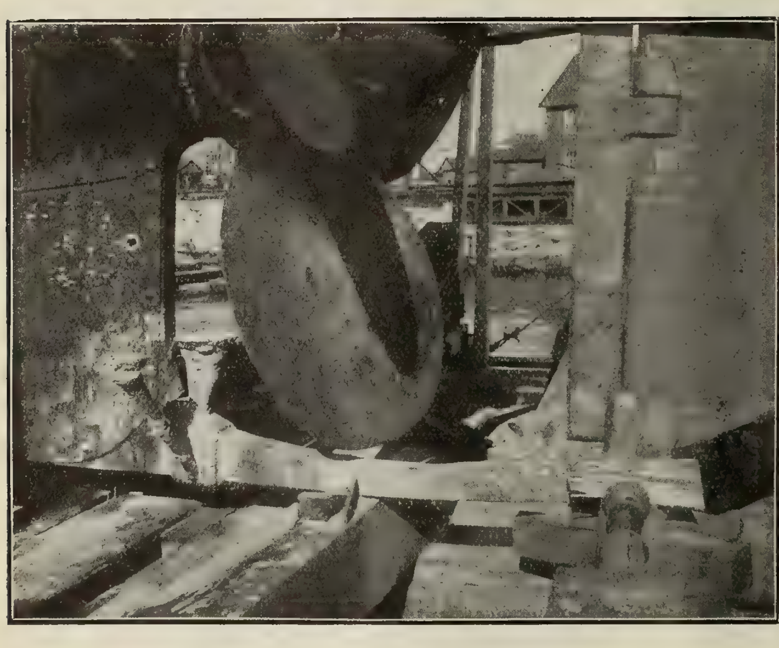

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charge city fares to the cemetery. (May, pg. 353.)

Quebec Ry., Light and Power Co.—The work of reconstructing the company's power line is approaching completion. The transmission line has been changed from one of 5,000 volts to one of 25,000 volts. A large storage battery has been installed for use at the busy times, when extra power is required. A new substation has been completed, and is being utilized. The Canadian Westinghouse Co. supplied the transformers, switchboards, lightning arresters, and other apparatus. (Feb., pg. 121.)

Southwestern Traction Co.—The several questions in dispute between the company and the Yarmouth Township Council have been settled, with the exception of that of the rates between St. Thomas and Union, Ont. (April, pg. 283).

Stratford and St. Joseph Radial Ry.—N. M. Cantin, one of the original promoters of this projected line, was in Stratford, Ont., July 3, in company with Z. H. Atkinson, of Bethlehem, Pa., representing a firm which it is said is prepared to finance construction. Mr. Cantin says the line will be constructed. (July, pg. 509.)

Electric Ry. Finance, Meetings, Etc.

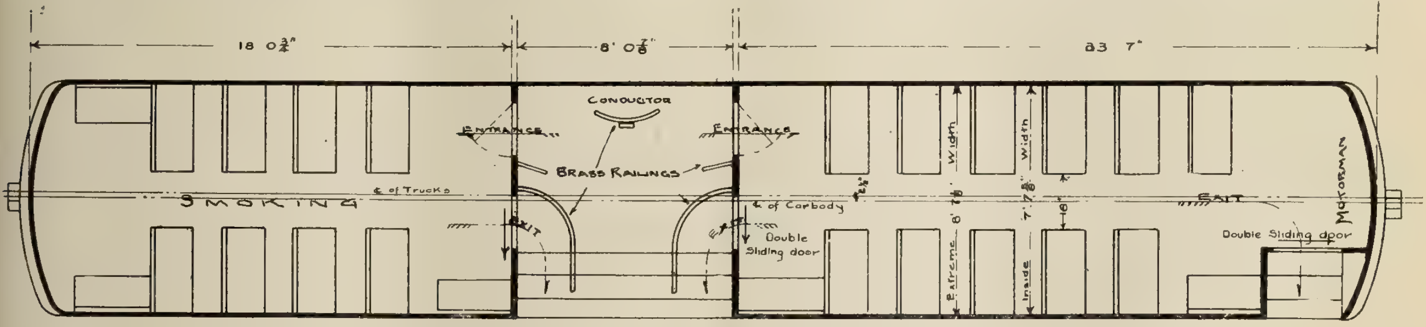
Berlin, Waterloo, Wellesley and Lake Huron Ry.—The Board of Railway Commissioners has recommended to the Governor-in-Council for approval, agreements for the purchase by this company of the Galt, Preston and Hespeler St. Ry., and the Preston and Berlin Ry., also of a lease by the B.W.W. & L.H. Ry. Co of its properties to the C.P.R. for 99 years. (July, pg. 507).

British Columbia Electric Ry.—Gross earnings for May, $161,212; expenses, $95,643; net earnings, $65,569; other income, $11,036; renewal funds, $10,750; against $126,804 gross earnings; $67,521 expenses; $59,283 net earnings; $9,536 other income; $9,325 renewal funds for May, 1907. Total earnings for 11 months ended May 31, $1,805,197; net earnings, $851,644; against $1,317,119 gross and $642,721 net earnings for same period, 1906-07.

Galt, Preston and Hespeler St. Ry.—See Berlin, Waterloo, Wellesley and Lake Huron Ry.

Halifax Electric Tramway Co.—Receipts for June, $16,215.65, against $15,604.83 for June, 1907. Total receipts for 6 months ended June 30, $80,576.80, against $77,370.10 for same period 1907.

Port Arthur Street Ry.—The award of the Ontario Railway and Municipal Board as to the value of the portion of the P.A.S.R. in the limits of Fort William, Ont., which the corporation of that city desires to purchase, provides as follows: "We find that the actual value to the city of Fort William is $52,000 for the portion of the street railway owned and operated by the city of Port Arthur within the limits of the city of Fort William, and the roadbeds, rails, plant and overhead construction, and appurtenances, having regard to the requirements of the various systems now in operation, together with the proportion of the cars which Fort William has agreed to take, being one-half of the rolling stock and being seven cars, and the accessories appurtenant thereto, and the motor generator in the transformer station of the Kaministikwia power station in Fort William and the real estate." The real estate referred to is the lot at the west end terminus, where the loop is located. The award also directs that Port Arthur must equip car 18 with new trucks and make some improvements to cars 7 and 10; that $52,000 shall be paid over to Port Arthur within 60 days, and shall be used as a sinking fund to redeem the debentures still outstanding in respect to the different portions of the property included in the award. By an agreement made during the course of the arbitration proceedings Fort William is to pay Port Arthur all the profits of the road until Dec. 1, 1913, after the expenses of operation, including the amount of the award, the sums spent in double tracking and in building certain branch lines from Simpson St. to the Empire elevator, an extension from the present western terminus to the west limit of the city, and an extension to the terminals of the G.T. Pacific Ry., have been deducted.



FLOOR PLAN, MONTREAL STREET RY. PAY-AS-YOU-ENTER CAR FOR SUBURBAN TRAFFIC.

The Toronto and York Radial Ry. is planning to erect a station and freight shed at Queensville, and a car house and shop at Deer Park, on its Metropolitan Division. The North Toronto Council has decided to ask the Ontario Railway and Municipal Board to compel the company to carry out a number of improvements upon the Metropolitan Division, including the provision of additional ballast on the line.

Additional car accommodation is required on the Kingston Road line, and it is said that land has been purchased near Victoria Park, on which car barns will be erected to serve this line, and to relieve the city car barns. (June, pg. 431.)

Toronto Suburban Ry.—Application has been made to the York Township council for an extension of the company's franchise for 25 years, and the matter will be taken up at the next meeting. The company is asking for this extension in order that it may secure the funds necessary to construct the proposed extension through Swansea to the Lake Shore Road. (June, pg. 431.)

Windsor, Ont.—A project is under consideration in Windsor, Ont., for the organization of a company to operate an electric railway to connect with Detroit, by way of the tunnel now under construction by the Michigan Central Ry. Among those interested in the new proposal are: J. A. Smith, Dr. Revell, A. J. Nelles, G. J. Leggatt, W. Bong, Windsor; G. Bouteillier, Walkerville, Ont., and G. King, Detroit, Mich.

Yarmouth Street Ry.—Some improvements and extensions of the electric railway at Yarmouth, N.S., are contemplated. It is also proposed to purchase some new plant, including a 300 k.w. generator, turbines, etc.

Kingston, Portsmouth and Cataraqui Street Ry.—Arrangements are being made, it is stated, for the submission of a by-law at the city elections in Jan., 1909, in favor of the municipal ownership of the street railway. It has been discovered, a press dispatch states, that the city light, heat and power plant has been supplying the company with power at a loss. The company pays the city 1.66 cents a kilowatt at the switchboard, and it costs the city 1.94 cents a kilowatt to produce it.

London St. Ry.—A half-yearly dividend of 3% was declared at a meeting of directors held July 7.

Montreal St. Ry.—Gross earnings for June, $331,211.91; operating expenses, $166,083.56; net earnings, $165,128.35; city percentage on earnings, $28,895.88; interest on bonds and loans, $19,652.21; contingent for renewals, $16,095.35; rent leased lines, $444.43; surplus, $100,040.48; against $325,252.26 gross earnings; $175,030.77 operating expenses; $150,221.49 net earnings; $27,638.33 city percentage on earnings; $11,904.88 interest on bonds and loans; $15,902.39 contingent for renewals; $339.96 rent leased lines; $94,435.93 surplus for June 1907. Total earnings for 9 months ended June 30, $2,672,763.53; operating expenses, $1,651,707.09; net earnings, $1,021,056.44; standing charges, $450,876.10; surplus, $570,180.34, against $2,424,887.90 total earnings; $1,585,598.38 operating expenses; $909,289.58 net earnings; $389,614.22 standing charges; $519,675.36 surplus for same period 1906-07.

A quarterly dividend of 2¼%, payable Aug. 1 to shareholders of record July 13, has been declared.

St. John Ry.—The questions of snow removal and street repairing, in reference to which there is considerable difference of opinion between the company and the city council of St. John, N.B., are under discussion by the Public Works Board and the company. The Board desires a five-year contract at $12,000 a year for snow cleaning and the company asks for a contract for 10 years. The matter is still under consideration, it having been decided July 8 that a special meeting of the council would be held at which all questions about which there is a difference of opinion would be brought up for settlement. (June, pg. 431).

Suburban Tramway Co., Montreal.—Following are the officers and directors for the current year: President, Hon. L. J. Forget; Vice-President, K. W. Blackwell; other directors: P. Galibert, Sir H. M. Allan, R. Meighen; Secretary-Treasurer, P. Dubee; General Manager, W. G. Ross.

Toronto and Mimico Ry.—The railway portion of the company's undertaking having been acquired by the Toronto and York Radial Ry., the name of the company has been changed to the Toronto Power Co.

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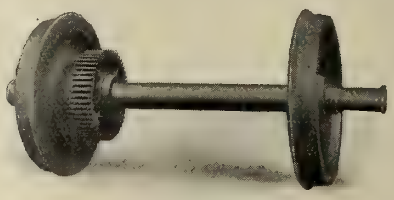

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OF EIGHT SAMPLES OF FALLS HOLLOW STAYBOLT IRON

Date—May 7, 1908.

No.	Tension Load lbs. per sq. in.	Revolutions per minute	Number of Revolutions to rupture
1.	4,000	100	10,188
2.	4,000	100	13,123
3.	4,000	100	8,339
4.	4,000	100	9,363
5.	4,000	100	8,868
6.	4,000	100	10,880
7.	4,000	100	11,888
8.	4,000	100	5,318
Average			9,746

The tests were made on an Oslen Staybolt Machine in accordance with the specifications recommended by Committee on Staybolts of the American Society for Testing Materials.

These specifications include the following tensile strength: Not less than 48,000 lbs. per sq. in. Per cent of Elongation in 8 inches, not less than 28. Per cent of Contraction of area, not less than 45. Must stand 6,000 revolutions, when one end is fixed and the other end (8 inches from fixed end) is moved in a circle of 3/32 inches radius, while the bolt is under a tension load of 4,000 lbs. per sq. in. The bolts were threaded with standard staybolt dies—12 threads to the inch.

Certified to by **W. K. HATT,** Professor of Civil Engineering and Director.

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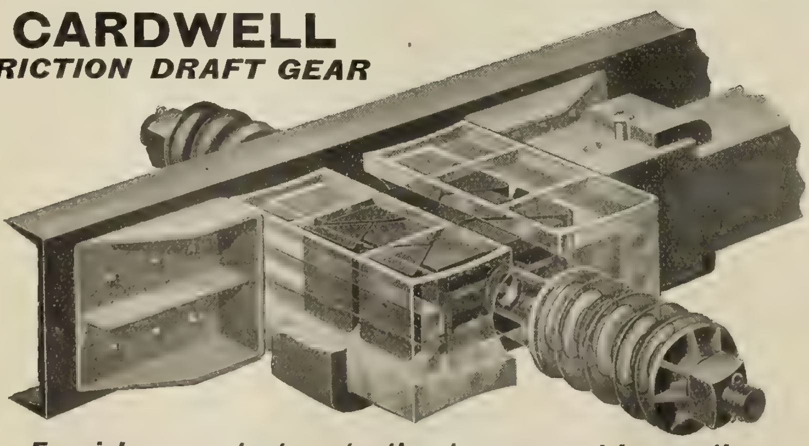

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MONTREAL STREET RY. PAY-AS-YOU-ENTER CAR FOR SUBURBAN TRAFFIC.

The Toronto Power Co., formerly known as the Toronto and Mimico Ry. Co., has been granted supplementary letters patent, increasing its capital stock from $100,000 to $1,000,000.

Toronto Ry.—Car earnings for June, $301,842.19; against $285,622.43 for June, 1907. Total earnings for 6 months ended June 30, $1,673,147.86; against $1,576,279.24 for same period 1907.

Electric Railway Notes.

The British Columbia Electric Ry. has completed arrangements for equipping all its city cars with air brakes.

The Windsor, Essex and Lake Shore Rapid Ry. is reported to be in the market for a number of box cars for its freight traffic.

D. A. Valleau, heretofore Assistant Superintendent Bay of Quinte Ry. at Napanee, Ont., has been appointed Superintendent Oshawa Ry. (electric).

F. E. Low, heretofore Superintendent St. Paul City Ry., St. Paul, Minn., has been appointed Manager Windsor, Essex and Lake Shore Rapid Ry., succeeding W. N. Warburton, resigned.

The Montreal Sreet Ry. is giving free trolley rides to the poor children of the city at fixed hours in the day. The trip lasts about three hours. During the summer of 1907, over 50,000 children were taken round the city on the company's cars.

W. N. Warburton, who has been Manager of the Windsor, Essex and Lake Shore Rapid Ry. practically since its formation, was presented recently with an oak chair and a travelling bag by the business men of Kingsville, Ont., and a case of silver knives and forks by the employes, on resigning his position.

The Toronto Ry. has given notice to the Ontario Railway and Municipal Board of its intention to appeal from the decision of the Divisional Court confirming the assessment levied by the city on the storage battery plant at Front and Frederick streets, Toronto. The assessment is $100,000, but in 1907 it was reduced to $75,000 by the Ontario Railway and Municipal Board.

The Kootenay Development Syndicate has been granted a license under the British Columbia Act respecting foreign corporations to do business in the province. The provincial offices are at Nelson, R. S. Lennie being its attorney. The company has power to develop water powers and distribute electrical energy, and to construct, acquire and operate tramways and street railways.

The Toronto City Board of Control proposes to direct the attention of the Crown Attorney to a clause in the Criminal Code which makes it an offence for any person to stop a railway service or to interfere with it in any way, and to the action of the Toronto Ry. in stopping the service on July 11. In this connection it might be just as well to consider how this clause affects the Orange procession, the passing of which brought about the stopping of the cars.

The St. Thomas, Ont., City Engineer recently submitted an estimate for the extension of the municipal street car system to Port Stanley. The cost of roadbed is placed at $6,638 a mile for 7 miles, totalling $46,466; bridges, $3,000; turnouts, $1,500; a total cost, exclusive of equipment, of $51,200. Overhead construction was estimated at $1,670 a mile, or a total of $11,690; and incidental expenditure $5,000, bring the outlay up to a total of $67,950.

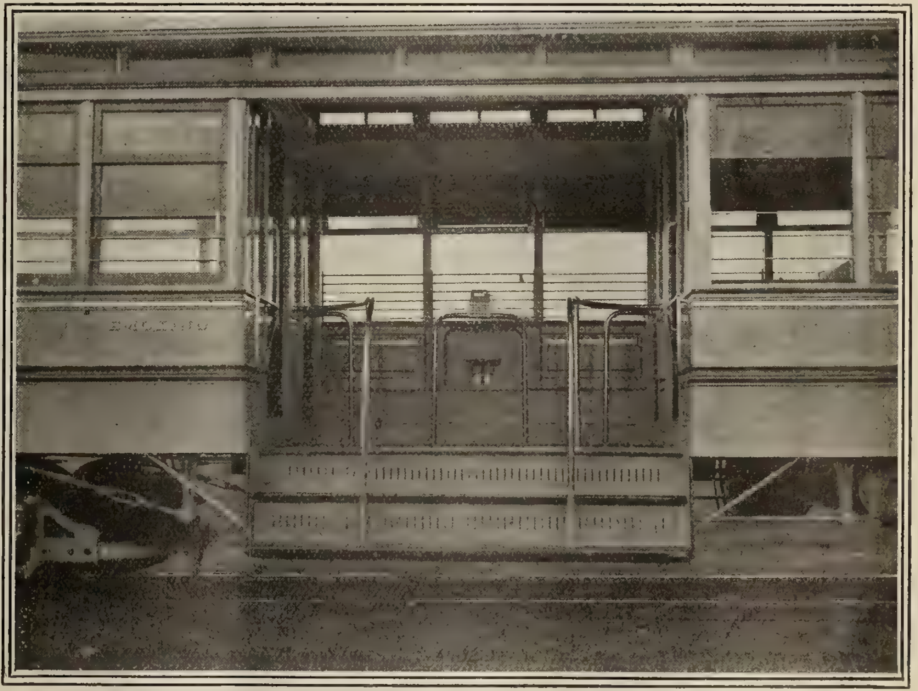
C. K. Green, heretofore Traction Manager of the Dominion Power and Transmission Co., Hamilton, Ont., is reported to have been appointed Master of Construction; F. P. Griffith to have been appointed Superintendent of Traction, temporarily, and Jno. Gibson as Assistant. We are advised that the reports are incorrect, that the changes are in the nature of an experiment, and are not permanent, and that no titles have been given in connection therewith.

M.S.R. New Suburban Car.

The Montreal Street Ry. has placed in service on its suburban line—the Montreal Park and Island Ry.—a new pattern pay-as-you-enter car, specially designed for suburban or interurban lines. It weighs 58,400 lbs., is 50 ft. long, 8 ft. 7⅛ in. wide at belt rail, and 8 ft. 5 in. high from bottom of sill to top of roof. It is ventilated by sash ventilators, fitted with air brake and modern fender; and equipped with a 40 h.p. motor for direct current.

As will be seen by reference to the accompanying illustrations the platform, instead of being at the rear end of car, is placed about three-quarters' distance from the front, the back compartment being set apart for smokers. This car has all the latest improvements and is claimed to be one of the most comfortable and prettiest cars in operation on any system in the world. The windows being large and low give passengers every opportunity of admiring the scenery along the route through which it operates; the doing away with the rear platform is a decided improvement, as it prevents rocking, the car being evenly balanced. Passengers are not allowed to stand at the entrance, thus ensuring free passage for those getting on or off cars, and the conductor being always stationed at the entrance provides against the possibility of an accident whilst getting on or off cars. Passengers enter the space between the two brass bars and, after depositing their fare in the fare-box, enter either the front or rear compartment of the car as they may desire. The exit doors are always closed, and after passengers leave the car, the conductor, by pressing a pedal which is operated by compressed air, closes the doors, thus ensuring absolute safety.

The car is handsomely fitted with the latest type of rattan seats. Its capacity is 26 seated in front and 22 seated in the rear. The finish of the car inside is cherry, natural color. The passage and aisles are covered with interlocking rubber tiling. The car is well lighted throughout, the main lighting being done in the centre of the roof, and individual lights over the seats, thus making reading an easy matter. The fittings are of polished brass. The ventilation is of the



ENTRANCE AND EXITS MONTREAL STREET RY. PAY-AS-YOU-ENTER-CAR FOR SUBURBAN TRAFFIC.

latest approved method and the car is found to be specially free from dead air. The car was built at the company's shops, Hochelaga, at a cost of $11,000.

A floor plan of the car is given on pg. 585. by reference to which it will be noticed that in addition to the two central exits, one for each compartment, there is one in front alongside the motorman.

◆

Front Seats on Open Cars.

The Secretary of the Ontario Railway and Municipal Board issued the following circular, July 13, to electric railway companies under the Board's jurisdiction:

"The regulation prohibiting passengers riding on front of open motor cars. The result of the conference between the Board and the representatives of the municipalities and of the railway companies, which was held in June last at the Parliament Buildings, in reference to this matter, was to convince the Board that to pass a general regulation, without discrimination, prohibiting electric and street railways from allowing passengers to occupy the front seat on open motor cars, was impracticable, and would in many instances be oppressive. The reasons why such a regulation should not be passed are now obvious to the Board. The local conditions differ in each city or town. A regulation that might be practicable in one town would be perfectly unsuitable to another.

"The Board have concluded that the only reasonable and practicable course to pursue is to request each railway company to pass a regulation, subject to the approval of the Board, regulating the occupation by passengers of the front seat in front of open motor cars, which will meet the local circumstances of the company, and which, at the same time, will be adequate for the protection of the public. The Board therefore suggest that you should pass such a regulation at an early date and submit it for their approval."

In accordance with the request of the Board, the following regulations have already been passed:

Ottawa Electric Ry.—"After this date, conductors and motormen will not allow any passengers upon the front platform of their car except those who can be seated on the front seat of open cars, which will be limited to five adult male passengers. No persons except officials of the company will be permitted to stand on the front platform of any car. The motormen will be held equally responsible with the conductors for the proper enforcement of this order."

Sandwich, Windsor and Amherstburg Ry.—"Passengers must not be allowed to stand on the front platform. Motormen must enforce this order."

The Toronto Ry. has had the following rules in force for about two years, and has submitted them to the Ontario Railway and Municipal Board for approval: "Women and children are not allowed, under any circumstances, to ride on the front seat of open cars. Officers of the company and policemen only are allowed to stand on the front platforms."

◆

The Hamilton Street Ry. has agreed with the city council to provide 50 new cars for its lines as follows: By May 24, 1909, ten double-truck cars; in 1910, five double and five single-truck cars; in 1911, two double and eight single-truck cars, and two double and three single-truck cars in each of the four following years. The company has the right to substitute single-truck cars after 30 cars have been provided if the traffic does not warrant double-truck cars. The specifications of the cars are under discussion. The company desires to put on side-seated cars, and the council committee desires to have cross-seated cars.

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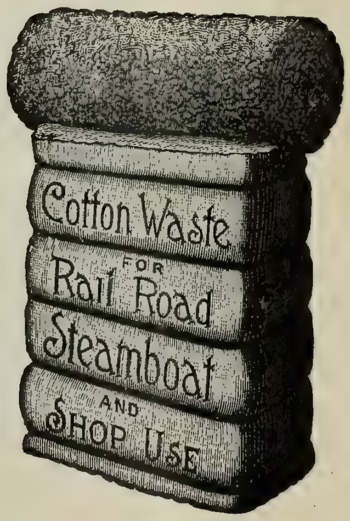

Colored and White all Grades. In Bales of 50 lbs., 125 lbs., 250 lbs., 500 lbs.
We carry a large stock and fill orders promptly at Lowest Market Prices.

Grain Elevator Notes.

The Canadian Elevator Co. is about to erect an elevator at Elstom, Sask.

The Nanton Grain and Lumber Co. has decided to build an elevator of 30,000 bush. capacity at Cayley, Alta.

The Smith Grain Co.'s elevator at Stockholm, Sask., was recently destroyed by fire, the damage being estimated at $5,000.

The Dominion Parliament has voted $21,500 on capital account for work at the grain elevator at Port Colborne, Ont.

The Consolidated Elevator Co. is reported to be arranging for the enlargement of its elevator at Fort William, Ont., to double its present capacity of 600,000 bush.

Notice has been given that the Didsbury Elevator Co., Ltd., and the Alberta Pacific Elevator Co., Ltd., of Alberta, are to be dissolved and their names removed from the register.

Press reports state that a large number of applications have been granted by the G.T. Pacific Ry., for the construction of elevators along the route through Manitoba, Saskatchewan and Alberta, and that by the time the crop is ready, there will be at least 30 elevators ready to receive grain.

The British America Elevator Co., of Winnipeg, is to erect 10 elevators along the Canadian Northern Ry.'s Brandon-Regina branch, seven of which, press reports state, are to be built between Regina and Kaiser, where the C.N.R. and C.P.R. lines intersect. Work is proceeding on three of these elevators.

The Security Elevator Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $500,000 and office at Winnipeg, to construct, acquire and operate elevators, with the requisite docks, wharves, engines, plant and appliances; to purchase or otherwise acquire and operate steam and other vessels, and to carry on a transportation business by land or water. The provisional directors are: L. P. Downing, R. H. Moore, H. Phillips, T. Gillespie, W. K. Chandler, Winnipeg.

MARINE DEPARTMENT.

Duty on Vessel Repairs.

Following is the full text of the amendment to the Customs Act, Revised Statutes of Canada, 1906, chap. 48, passed by the Dominion Parliament at its recent session:

"Sec. 70. The equipments or any part thereof, including boats purchased or supplied in a foreign country for, or the expenses of repairs made in a foreign country upon, a vessel intended to be employed, or which is thereafter employed, in the coasting trade of Canada, shall, on the arrival of such vessel in any port of Canada, if arriving within one year after such repairs have been made or equipments purchased or supplied, be liable to entry and the payment of duty on the cost thereof in such foreign country at the following rates, viz.: (a) On the expenses of repairs, 25% ad valorem; (b) on equipments, including boats, the same rate of duty as if the articles were imported into Canada in the ordinary course.

"2. If the owner or master of such vessel shall wilfully and knowingly neglect or fail to report, make entry and pay duties as herein required, such vessel, with her tackle, apparel and furniture, shall be seized and forfeited.

"3. If the owner or master of such vessel shall, however, furnish good and sufficient evidence that such vessel, while in the regular course of her voyage, was compelled by stress of weather or casualty to put into such foreign port to make such repairs, to secure the safety of the vessel to enable her to reach her port of destination, or that it would be impracticable to make the repairs in Canada for the want of a dock of sufficient capacity to receive the vessel, then it shall be competent for the Minister of Customs to authorize the refund of the duties on such repairs, and such vessel shall not be liable to forfeiture under the next preceding section. Provided that repairs in the course of being made to a vessel in a foreign country at the time when this Act comes into force or made prior to such time shall not be dutiable under the said Act."

A deputation of some 15 to 20 members of the Dominion Marine Association, representing the principal companies in its membership, waited on the Ministers of Customs and Marine on July 2, and protested strongly against the proposal to impose a duty of 25% on all vessel repairs and equipments made in the U.S. The deputation's protest finally resolved itself into a very emphatic one, declaring it to be unfair to impose a duty even in cases where a Canadian dock might not be available for repairs. The Minister of Customs was equally emphatic in saying that if a vessel owner did not care to tie up his vessel and wait until the Collingwood dry dock was empty, he could take the alternative, that is, go to the U.S. and pay the duty when his vessel returned. The Minister of Customs expressed no intention to have any mercy upon vessel owners, and insisted on the propriety of his resolution, in the face of the apparent fact that it would establish a monopoly at Collingwood, where whatever prices the yard thought proper might be charged, so long as they were less than U.S. prices, plus the duty. H. H. Gildersleeve, Manager of the Northern Navigation Co., who lives at Collingwood, made a very clear and forcible address, in which he pointed out that the present action, although possibly designed to foster Canadian industries, would be of little benefit for the present, as the Collingwood dock was getting plenty of work, and the result of the Minister's resolution would simply be to force Canadian vessels to go to the U.S. for repairs and pay a duty. Of course the Government's revenues would be swelled by this tax levied on vessels. Incidentally the Collingwood dry dock would become a monopoly as well. Mr. Gildersleeve pointed out very clearly that a duty on repairs is not sufficient to encourage the shipbuilding industry in Canada, as shipbuilding is the key to the success of a shipyard, and occasional repair work would not keep a yard going. When the Minister of Customs' resolution came up in the Commons July 4, he stated that the only conditions under which he would permit a refund of duty would be where a vessel was compelled by stress of weather or cas-

LIST OF STEAM VESSELS REGISTERED IN CANADA DURING JUNE, 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
Adelard	126,143	Yamaska, Que., 1907	Screw, 8 N.H.P.	46.5	9.5	3.4	17	10	Sorel, Que	A E. Belisle, Yamaska, Que.
Eldred	122,445	The Range, N.B., 1907	“ 13 “	51.4	12.6	5.4	25	17	St. John, N.B.	J. F. Bridges Tugboat Co., Gagetown, N.B.
H. O. G.	122,200	Surrey, B.C., 1906	“ 12 “	29.6	9.0	3.7	6	4	N.Westminster, B.C.	C. H. Green and F. Hatt, Elgine, B.C.
Harland	122,580	Shelburne, N.S., 1908	“ 33 “	113.0	27.0	6.7	352	217	Yarmouth, N.S.	New Burnal Johnson Iron Co., Yarmouth, N S.
Hera	126,087	Vancouver, B.C., 1908	“ 1 “	24.5	7.1	3.2	5	3	Vancouver, B.C.	A. Macallum, Vancouver, B.C.
J. P. Douglass	126,079	“ “ “	Paddle, 3 “	83.4	20.4	5.1	237	149	“ “	A. E Yates, “ “
Leebro	122,394	Victoria, B.C., 1908	Screw, 22 “	123.5	28.8	11.1	323	198	Victoria, B.C.	Leeming Bros., Victoria, B.C.
Lillooet	122,395	“ “ “ “	“ 94 “	163.0	27.0	13.0	575	311	“ “	B. C. Marine Railways Co., Victoria, B.C.
Semiahmo	126,086	Vancouver, B.C., 1907	“ 1½ “	33.5	10.6	4.5	16	11	Vancouver, B.C	R T. Burtwell, Vancouver, B.C.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING JUNE, 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross Tons	Reg. tons.	Port of Registry.	Owners.
Amarins	126,145	Sorel, Que., 1907	Sloop	106.6	23.2	7.2	..	131	Sorel, Que	N. Laroche, Sorel, Que.
Bonnie B	126,106	Tancook, N.S., 1908	Schr.	48.4	13.0	6.5	..	19	Lunenburg, N.S.	P. Publicover, Blandford, N.S.
Enid Hazel	126,181	Shelburne, N.S., 1908	“	52.0	18.0	6.7	..	31	Shelburne, N.S.	R. Forbes, Forbes Point, N.S.
Ethel R.	122,593	St. George, N.B., 1902	Sloop	26.0	11.7	6.0	..	12	St. Andrews, N.B.	C. M. Richardson, Grand Manan, N.B.
Gander	122,622	Bay du Vin, N.B., 1908	Schr.	32.9	10.0	4.9	..	10	Chatham, N.B.	H. Williston, Bay du Vin, N.B.
John Kennedy	126,151	Levis, Que., 1892	Dred.	92.2	36.7	6.9	..	359	Montreal	Harbor Commissioners, Montreal.
Keewaydin	94,853	Port Grenville, N.S., 1889 Liverpool, N.S., 1908	Schr.	108.0	28.4	9.4	..	158	Liverpool, N.S.	I. A. Hopkins, Halifax, N.S.
Mabel C.	121,880	Cape Island, N.S., 1905	Sloop	32.0	10.6	6.0	..	10	Barrington, N.S.	A. Nickerson, Cape Island, N.S.
Manseau	126,144	Sorel, Que., 1908	“	82.2	21.1	5.7	..	67	Sorel, Que	M. Paulhus, Sorel, Que.
Oriole B.	122,427	Chezzetcook, N.S., 1908	Schr.	60.0	18.4	6.8	..	32	Halifax, N.S.	J. Bellefontaine, Chezzetcook, N.S.
Pride of the Fleet	122,623	Caraquet, N.B., 1908	“	44.0	14.7	6.5	..	24	Chatham, N.B.	P. J. Fiott, Caraquet, N.B.
Oscar Rouette	126,152	Point du Lac, Que., 1900	“	75.0	19.9	5.3	..	53	Montreal	O. Rouette, Point du Lac, Que.
Qualla	122,198	N. Westminster, B.C., 1908.	Barge	96.0	32.0	7.0	..	188	N. W'minster, B.C.	S. Emerson, New Westminster, B.C.
Rustic	122,624	Chatham, N.B., 1907	Schr.	33.0	11.0	4.6	..	10	Chatham, N.B.	J. Fraser, Rexton, N.S.
Viv. B. Walters.	126,105	Lunenburg, N.S., 1908	“	91.3	24.5	10.5	..	86	Lunenburg, N.S.	W. C. Smith, & Co., Lunenburg, N.S.

ually to put into a foreign port to make repairs in order to secure her safety, or enable her to reach her port of destination, or where there is no dock in Canada of sufficient capacity to receive the vessel, or where the repairs are pending at the time the Act comes into force.

Atlantic and Pacific Ocean Marine.

Capt. G. P. Outram, of the Allan Line s.s. Corsican, stated recently that in his opinion the St. Lawrence channel was one of the safest and best lighted in the world.

The s.s. Pelican, chartered by the Hudson Bay Co., was in Montreal recently, loading supplies, after which she sailed for Fort Churchill, Hudson Bay, calling at H.B.Co. stations.

The s.s. Portsmouth, bound from Great Britain to Quebec with 3,700 tons of coal for use of the fleet accompanying the Prince of Wales to the Quebec Tercentenary celebrations, ran ashore near Cape Chatte lighthouse in the Gulf of St. Lawrence, July 13.

Press reports state that negotiations are in progress between the Jamaica Government and the C.P.R., for the establishment of a steamship service between Montreal and the West Indies, and it is stated that it is not improbable that the C.P.R. will agree to place vessels on the route.

The s.s. Bengore Head, which sailed from Montreal and Quebec at the end of May, ran amok in Portsmouth harbor, Eng., recently, colliding with and damaging H.M.S Vengeance, and finally running aground. She was subsequently floated, when it was found that a large hole had been made in the bows above the waterline.

The s.s. Glenfarg, which has been chartered by the C.P.R. for the trans-Pacific route, arrived at Victoria recently, and has been placed in service. She is owned by the Glen Steamship Line, and was formerly operated between Liverpool, Eng., and Yokohama, and latterly was chartered by the Toyo Kissen Kaisha, in the South American service.

J. F. Furness, manager of Furness, Withy & Co., Ltd., recently returned to Halifax, N.S., after a visit to Great Britain. It is stated that his visit was due to the arrangements in progress for the improvements of the company's Canadian service, and to the inspection of plans and specifications of the new vessels it is proposed to build specially for the route.

The salvage operations on the s.s. Anselm, wrecked off the New Orleans coast, were placed by the London Salvage Association in the hands of Capt. Logan, Superintendent of the Manchester Liners, Montreal, and have been successfully accomplished. The vessel was stripped and floated with comparative ease, after which she proceeded to New York, about 1,800 miles, under her own steam. It is estimated that the loss will be rather less than 40%.

The Thomson Line s.s. Arcola struck on St. Paul Island, off the Nova Scotia coast, July 8, and foundered, and is regarded as a total loss. She was built at West Hartlepool, Eng., in 1897, and is a screw-driven vessel with engines of 240 n.h.p. Her dimensions were: Length, 314 ft.; breadth, 44.1 ft.; depth, 20.7 ft.; tonnage, 2,599 gross, 1,651 register. This is one of 10 large ocean-going vessels which were transferred from the British to the Canadian register during 1907.

Replying to a question in the House of Commons recently, the Premier said it is not the intention of the Government either to oppose or to suggest any port in connection with the suggested All-Red Line. This is

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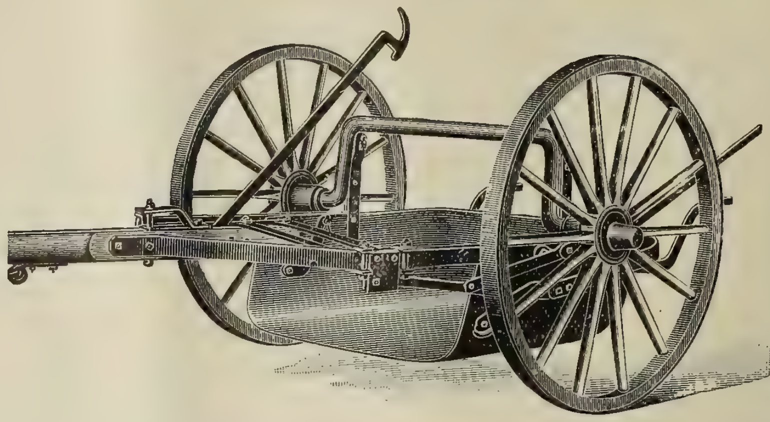

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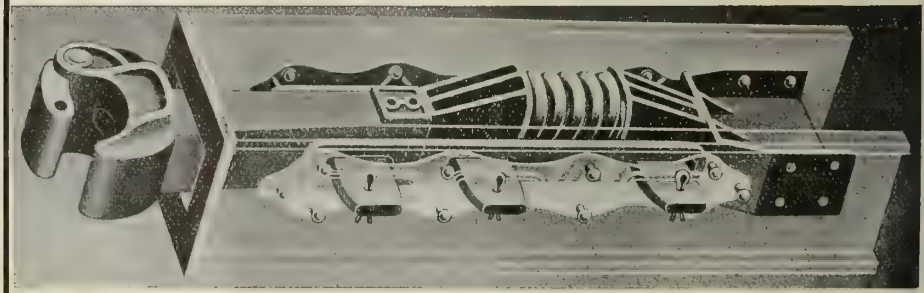

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a question, he said, which should be decided on purely business reasons, and left altogether to the company which may undertake the service, the only condition to be insisted upon by the Government being that the service must be between the United Kingdom and Canada.

Captain Gray, of the Hudson Bay Co.'s s.s. Pelican, who has been intimately connected with transport service on Hudson Bay for nearly 40 years, is reported to have recently expressed his opinion as to the use of the route for grain transportation to the effect, that it is dangerous on account of icebergs, that it is only safe for three months in the year, and that it is closed too early to be available for the transportation of grain. Most of the harbors, he also says, are too shallow for large vessels.

The s.s. Regulus, from Philadelphia to St. John's, Nfld., was reported ashore at Petty Harbor, about 10 miles south of St. John's, July 10. The steamships Adventure and Petrel were sent to her assistance, but her position and the prevalence of fog render the chance of saving her very poor. The Regulus is owned by Harvey & Co., St. John's, and trades between that port and Philadelphia with coal. She was built at Newcastle-on-Tyne, Eng., in 1878, and is a screw-driven vessel, with triple expansion engines of 126 n.h.p., having cylinders 17½, 28 and 47 ins. diar., by 33 ins. stroke; her dimensions are: Length, 209.5 ft.; breadth, 30.6 ft.; depth, 13.3 ft.; tonnage, 1,137 gross, 649 register.

The International Mercantile Marine Co. has recently acquired the ship Mersey, having dimensions as follows: Length, 271 ft.; breadth, 39 ft.; tonnage, 1,829 gross register, with the intention of utilizing her as a training ship for mercantile marine officers, for the fleets of its associated lines. About 60 boys will be accommodated, preference being given to those who have gone through a preliminary training on the school ships Conway and Worcester. The control of the vessel will be with the White Star Line, and the customary routine on similar vessels will be followed. The period served will be 4 years, or 3 years in the case of those who have previously served 2 years on the Conway or Worcester, after which, on obtaining second mate's certificate, opportunity will be given to join steamers of a certain size, where qualifications as mate and master follow in due course. The terms are: First year, $350; second year, $300; third year, $200; fourth year, $150; payable in advance, $50 being repaid to all cadets passing the necessary examinations and holding officers' positions in one of the associated lines to the managers' satisfaction for 3 years.

Maritime Provinces and Newfoundland.

J. A. McDonald has been appointed Harbor Master at Mulgrave, N.S.

G. Robertson has been appointed Port Warden at Bathurst, N.B.

M. Turner, a retired master mariner of Glace Bay, N.S., was drowned off Cape Smokey, July 3.

G. T. Douglas, A. Vernon and A. Fowler have been appointed Commissioners of the pilotage district of Amherst, N.S.

Capt. H. T. Whelpley, St. John, N.B., died there recently as the result of a fall into the hold of the schooner Ruth Robinson.

The Belmont Shipping Co.'s bark Belmont, of Yarmouth, N.S., was considerably damaged by a fire which broke out in Boston harbor, July 8.

The signal tax, amounting to $1, hitherto levied on all vessels entering Halifax harbor, has been cancelled so far as regards vessels of less than 150 tons register.

The name of the schooner Keewaydin, official number 94,853, registered at Liverpool, N.S., has been changed by order-in-council to Myrtle V. Hopkins.

W. C. Job, who returned to St. John's, Nfld., July 4, announced that he has placed an order in Glasgow, Scotland, for the building of a high speed sealing steamboat.

The St. John, N.B., ferry steamboat Ludlow collided with the schooner Virginian, July 6, both vessels being considerably damaged in the bows. An investigation will probably be held.

J. Fleming, a well-known coast pilot for over 60 years, died at Ketch Harbor, N.S., July 12, aged 98. He ran the blockade at Halifax harbor with the confederate cruiser Tellahassee in the war of 1864.

J. W. Carmichael & Co. launched the first steel sailing vessel built in the Maritime Provinces, from their New Glasgow, N.S., yards, July 14. The vessel will register 410 tons, and carry about 500,000 feet of lumber.

R. Moffat and J. E. Kelly, Campbellton, N.B., have deposited with the Minister of Public Works, plans and descriptions of two wharves and approaches which they propose to construct in the Restigouche River at Campbellford.

The Allan Steamship Line has paid $1,100 to the owners of the Lunenburg, N.S., schooner Beatrice S. Mack, for damage sustained in a collision with the s.s. Victorian, outward bound from Halifax to Liverpool in March. The owners of the schooner sued for $3,000.

The dispute between the Dartmouth, N.S., Ferry Commission and its engineers, as to hours and wages, has been settled. The pay has been fixed at $67 a month, with 25c. an hour for overtime, and no work in the shops. The hours have been changed from an average of 9¾ to 9 a day.

The Newfoundland Government has authorized the payment of bounties on all vessels having whole or fixed decks, newly built and registered in the colony. The bonus is to be paid to the person for whom the vessel is built, and varies, $10 a ton being paid on vessels of 80 tons and upwards, built to Lloyd's specifications, and graduated amounts for smaller vessels.

The Pilotage and Harbor Committee of the Halifax Board of Trade at a recent meeting decided to ask the Dominion Government to supply a steamboat suitable for the requirements of the port to serve as a quarantine vessel in place of the Argus now in use. It was stated that the Argus, which has been in service for a number of years, was a second-hand vessel when purchased, and was condemned three years ago, and at that time an estimate of $20,000 was passed for the purchase of another vessel, but the amount has not been used.

The Interprovincial Navigation Co., of Campbellton, N.B., has chartered the Magdalen Islands Steamship Co.'s s.s. Lady Sybil to take the place of the s.s. Lady Eileen, recently wrecked near Gaspe, Que. The recent attempt to salve the Lady Eileen has been abandoned, and she is considered a total loss. The company has a mail contract between Campbellton and Gaspe ports, and it is not considered probable that it will build another vessel to replace the one lost, but rather that if the Government will release the contract the company may wind up the business.

An order-in-council has been passed approving an amendment to the rules and regulations for the government of pilots in the pilotage district of Shediac, N.B., by the addition of the following to no. 7: "That all ships or vessels propelled by steam or driven by power other than sails shall pay 4c. per ton on her register tonnage in addition to the above rates." This amendment was approved at a meeting of the pilotage authority last year, the reason given being that it was considered essential in the best interests of the port that two efficient pilots be maintained, which on account of inadequate revenue was impossible.

The dimensions of the vessel recently ordered in Glasgow, Scotland, by Bowring & Co., Ltd., Liverpool, Eng., and Newfoundland, mentioned in our July issue, are: Length, 305 ft.; breadth, 42.9 ft.; depth, moulded, 24 ft. She will be fitted with triple expansion engines of about 2,600 n.h.p., with cylinders 24, 40 and 64 ins. diameter, by 42 ins. stroke, with forced draught, and capable of a speed of 13 knots an hour. Accommodation will be provided for 100 first-class and 60 second-class passengers. During the greater part of the year she will be on the St. John's, Halifax and New York route, and for the remainder, will engage in seal fishing.

Province of Quebec Marine.

The Montreal branch of the Canadian Manufacturers' Association has called the attention of the city council to the lack of proper fire protection at the wharves.

It is reported that the Montreal longshoremen have decided to form a local organization to look after their interests, and to separate from the International Union.

The Government icebreaking steamship Montcalm, which was damaged recently by colliding with the C.P.R. s.s. Milwaukee, was released from the Levis dry dock July 1, after completion of repairs.

The number of ocean-going vessels to enter Montreal from the opening of navigation to July 1, was 246, representing a tonnage of 655,155, an increase of 28 vessels and 79,467 tons over 1907. The harbor revenues for the same period were $90,710, against $76,697 in 1907.

The St. Lawrence Canadian Navigation Co.'s s.s. Imperial collided with the Richelieu and Ontario Navigation Co.'s s.s. Quebec, opposite Varennes, Que., July 5. Owing to the damage to the paddle wheel, the Quebec was towed to Montreal, where repairs were made during the week. Press reports state that the two vessels were proceeding along the river a few yards apart when the Imperial suddenly swerved and crashed into the Quebec's paddle box. The Imperial, formerly known as the Sovereign, was mulcted in damages last year for sinking the barge Germaine, through the wheel chains having jammed in the rudder blocks, which, it was stated in the course of evidence before Commander Spain, had happened on previous occasions.

Ontario and the Great Lakes.

The Owen Sound Dredging Co., Midland, has recently received a new dredge, built by M. Beatty & Sons, Welland.

The dredge under construction for the Toronto City Council was launched at Polson's Iron Works, Toronto, July 6.

The Hamilton Steamboat Co. has declared a dividend of 5% for the first half of this year, being at the rate of 10% per year.

The Ontario and Quebec Navigation Co.'s s.s. Niagara is reported to have been removed from the Welland-Buffalo route, and sent to Montreal.

J. H. Teare, J. McKechnie and W. T. Cook, have been appointed Government wharfingers at Port Finlay, Providence Bay and Cook's Bay, Ont., respectively.

The name of the steam tug Fannie L. Baker, official number 126,092, registered at St. Catharines, Ont., has been changed by order-in-council to Thomas Freel Battle.

The Lake Ontario and Bay of Quinte Navigation Co.'s s.s. Caspian was severely damaged recently by a steam yacht colliding with her in backing from her berth at Kingston.

The s.s. Amethyst, which ran ashore on Green Island June 30, was got off at high tide, with the assistance of the Government s.s. La Canadienne, July 2, without sustaining any damage.

The U.S. steamboat Arundel, which ran on a shoal near Thousand Islands in June, was subsequently released and taken to Kingston, where she was placed in the dry dock for repairs.

During June there entered Toronto harbor 57 propellers, 489 side-wheel steamers, and 92 sailing vessels, against 71 propellers, 541 side-wheel steamers, and 72 sailing vessels for June, 1907.

The Canadian Lakes Transportation Co.'s s.s. Tagona arrived in Toronto July 14, from Great Britain. She is a sister vessel of the Kenora and Regina, descriptions of which we have already published.

A gasolene boat named Priscilla, owned in the U.S., being held up by the break in the Cornwall canal, it was decided to attempt the passage up the Long Sault Rapids, which was successfully accomplished.

Tenders are under consideration by the Department of Railways and Canals for widening the deep water channel along the west pier at Port Colborne, at the Lake Erie entrance of the Welland canal.

W. D. Mathews, a director of the Niagara Navigation Co., stated recently that there was no foundation for the newspaper report to the effect that the Mackenzie, Mann & Co. interests were about to acquire control of that company.

The Muskoka Lakes Navigation and Hotel Co. has placed its steamboat Cherokee in service. She was built in Toronto last year, her dimensions being: Length, 120 ft.; breadth, 23 ft.; depth, 7.2 ft.; tonnage, 328 gross, 160 register, with engine of 41 n.h.p., driving a screw.

The Kingston schooner Acacia, from Oswego, N.Y., to Kingston, ran ashore near Sackett's Harbor, N.Y., July 8, and became a total loss. She was built at Smith's Falls in 1871, her dimensions being: Length, 102.3 ft.; breadth, 20.4 ft.; depth, 9.4 ft.; 188 tons register, and was owned by C. C. Simmons, and valued at $2,500.

The s.s. Mary Horton, owned in Liverpool, Eng., and under a six months' charter to the Dominion Lumber Co., Montreal, in passing through lock 13, on the Welland Canal, July 14, backed on to the upper gates, which were carried away by the rush of water. The gates were replaced and traffic resumed on the following day.

The Merchants' Steamship Co.'s s.s. Beaverton arrived in Toronto July 14, from Great Britain, with a cargo of scoria blocks for W. H. Knowlton, Toronto. She will be operated on the Montreal-Fort William route, under the management of the Mathews Steamship Line, Toronto. A full description of her was given in our Feb. issue.

Tenders are under consideration by the Department of Railways and Canals for work on the Holland River branch of the Trent Valley Canal. The works to be carried out include the deepening and improving of a channel way from Cook's Bay, Lake Simcoe, to the mouth of the Holland

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MUSKOKA—The best route, the best trains, the best boat connections, the best service from Toronto Union Station over the Canadian Northern Ontario Railway. The Lake Shore Express is without a superior.

NEW LINE TO SUDBURY—The Canadian Northern Ontario extension from Parry Sound to Sudbury is now open. The Lake Shore Express daily, except Sunday, being continued to Sudbury through the delightful fishing and camping regions of Bolger Lake, Deer Lake, Maganetawan, Still, Key, Pickerel, French, and Wahnapitae Rivers. Write C. Price Green, Passenger Agent, Canadian Northern Ontario Railway, Toronto.

OCEAN SHORE OF NOVA SCOTIA—Seven hundred miles of the loveliest coast in America skirted by the Halifax and South Western Railway. Boston and New York boat connections at Yarmouth. Branches to the Annapolis Valley. A railway along the Gulf of St. Lawrence coast of Cape Breton Island. Write P. Mooney, G.P.A., Halifax and South Western Railway, Halifax.

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River, along the river and its eastern branch to the Bradford road at Holland Landing.

The Montreal and Lake Erie Steamship Co.'s s.s. City of Montreal, which stranded at Farran's Point in June, was subsequently released and towed to Ogdensburg, N.Y., for repairs. It is stated that the cost of floating her and the removal to Ogdensburg was $20,000, and the repairs a further $15,000. She was formerly known as the China, and was built at Buffalo, N.Y., in 1871.

In reply to a question by R. Blain, M.P., the Minister of Public Works said, July 6, that he had received a petition asking the Government to buy Port Credit harbor, it having been handed over to a private company by the Ontario Government several years ago. This he could not consider, but if steps were taken to prevail upon the Provincial Government to bear one-half of the cost of dredging, etc., he would recommend that the Dominion Government bear the other half.

The U.S. Lakes Survey reports the levels of the lakes in feet above tide water for June as follows: Superior, 602.62; Michigan and Huron, 581.60; Erie, 573.62; Ontario, 248.62. Compared with the levels in May, Superior is 6½ ins. higher; Michigan and Huron, 3 ins. higher; Erie, the same, and Ontario 2 ins. higher; and compared with the average levels for 10 years, Superior is about the same; Michigan and Huron, 7½ ins. above; Erie, 10¾ ins. above; Ontario shows the highest level since 1870.

The Owen Sound Park Co.'s s.s. Canada was sold by auction recently to Chew and Doty, of Midland and Goderich. The price stated to have been paid is $2,500. She is to be overhauled and refitted and operated in the lumbering business. She was built at Wallaceburg in 1874, and was formerly named Queen City and afterwards J. W. Steinhof. Her dimensions are: Length, 123.2 ft.; breadth, 24.1 ft.; depth, 8.7 ft.; tonnage, 312 gross, 209 register, with engine of 120 n.h.p., driving a screw

The Northern Navigation Co. has sold its steamboat Britannic to the Montreal and Cornwall Navigation Co., for use on the route between Cornwall and Prescott. The Britannic, formerly known as the Rocket, was built in 1866 at Sorel, Que., and rebuilt in 1892. She was at one time owned by the Montreal and Cornwall Navigation Co., from which the Northern Navigation Co. purchased her in 1898. She is a paddle-wheeled steamer, her dimensions being: Length, 150.8 ft.; breadth, 25.6 ft.; depth, 9.2 ft.; tonnage, 428 gross, 228 register, with engine of 41 n.h.p.

The Ontario Railway and Municipal Board proposes to make an investigation in regard to the operations of the Huntsville, Lake of Bays, and Lake Simcoe Navigation Co.'s steamboats in the Lake of Bays district. The company also operates the Huntsville and Lake of Bays Ry., which has a length of about a mile across the portage between Peninsula and Fairy Lake. The Ontario Railway Act does not directly gives the Board power over the steamship lines operated by railways over which it has jurisdiction, but the Chairman of the Board is hopeful that a conference between the parties interested will result in a settlement.

Notice has been given of the existence of a shoal in the St. Clair River extending from opposite the car ferry docks at Sarnia to below the line of the International tunnel. It lies about 700 ft. from the Canadian shore, and has about 20.5 ft. of water covering it. Instructions are issued to heavily laden downbound vessels after straightening out from the turn at the head of the shoal at the mouth of Black River, to keep a course as nearly parallel to the Canadian shore as possible till well below the tunnel. The position of the shoal has been marked by a gas buoy painted red and black in horizontal stripes. A later report states that the Government has ordered dredges to be set to work at once for the removal of the danger.

The Toronto Ferry Co.'s steamboat Jasmine was taken for a trial trip to Oakville June 29, after having been overhauled at Toronto, and was subsequently placed on the island ferry route. The Jasmine has had a rather chequered career. She was originally known as the W. M. Aldersen and was built at Goderich, running for some time between Owen Sound and Wiarton. Later she was sold and operated on the lower lakes, where she was burnt to the water's edge. On being rebuilt at Toronto in 1892, her name was changed to A. J. Tymon. In 1902, an order was made by the Admiralty Court for the sale of the vessel to satisfy claims for wages preferred by the captain and crew, and the sale took place Jan. 28, 1903, after which she was re-named Ojibway, and operated by the Hiawatha Steamship Co., Sault Ste. Marie, Ont., to Georgian Bay ports. She was subsequently sold to a purchaser at Noyan, Que., from whom she was bought last fall by the Toronto Ferry Co. She is a screw-driven vessel, with engine of 18 n.h.p., her dimensions being: Length, 130.5 ft.; breadth, 21.6 ft.; depth, 8.7 ft.; tonnage, 194 gross, 132 register.

The C.P.R. s.s. Assiniboia, one of the vessels which arrived at the close of the navigation season last year, was divided at Quebec and towed in two sections to Buffalo, where the rejoining took place, left Owen Sound on her maiden lake trip July 4, for Sault Ste. Marie, Port Arthur and Fort William. It is alleged that on the down trip there was a race between the Assiniboia and the Northern Navigation Co.'s s.s. Huronic. Officials of the Northern Navigation Co. are credited with stating that the vessels left Port Arthur eight minutes apart and remained in that situation while passing Thunder Cape, and until Passage Island was reached, at 3.20 p.m., when the Huronic took the lead and gained about three lengths, which she retained until 7 p.m. At White Fish Point, 43 miles above Sault Ste. Marie, the Assiniboia was 10 minutes ahead of her rival, but the Huronic commenced to creep up, and at the point of separation for the different canals, but a short distance above the Sault, had reduced the time between her and the C.P.R. liner to five minutes. The actual time of the steamers on the run as given by the N.N. officials is: Huronic, 16 hours, 32 minutes; Assiniboia 16 hours, 35 minutes. M. McD. Duff, assistant to the Manager of the C.P.R. Steamship Lines, denies that any race took place, and says that before the Assiniboia started out strict orders were given that there was to be no racing, but that the boat was to keep as near to her schedule time as the safety of the passengers and interests of the company would permit.

Manitoba, Saskatchewan, Alberta, Etc.

The steamboat City of Grand Forks inaugurated a service between Grand Forks, N.D., and Winnipeg, July 10, and will make regular trips during the season. It is stated that this was the first time in 25 years that the upper Red River had been used for navigation.

Bright-Emery Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $50,000 and office at Winnipeg, to conduct a general wholesale fruit and produce business, and in connection therewith, to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks, engines, etc., and to transport persons and merchandise by land and water.

B.C. and Pacific Coast Marine.

W. J. Cullum and H. G. Robinson have been appointed assistant inspectors of boilers and machinery at Victoria and Vancouver respectively.

The Governor-General in Council has approved the amended rules and regulations for the management and working of the Esquimalt graving dock.

J. A. Thomson, local inspector of boilers and machinery, Victoria, has been appointed Supervising Inspector for British Columbia and Yukon Territory.

Steamer Leebro Ltd. has been incorporated under the B.C. Companies Act, with a capital of $28,000, to build, purchase, charter or otherwise acquire, and to operate steam and other vessels, and to carry goods and passengers.

B. W. Greer, who recently resigned the position of General Freight Agent C.P.R., Vancouver, has been appointed Manager of the Johnson Wharf Co., Ltd., and also agent for C. W. Cook and Co., steamship agents, Vancouver.

The Victoria and Sidney Ry. and Ferry Co.'s car ferry steamboat was launched at Seattle, Wash., July 8. She is of the following dimensions: Length, 160 ft.; breadth, 32 ft.; depth, 10 ft.; and is built to accommodate 6 loaded cars.

The Dolaura, a steam yacht built at Glasgow for Lieutenant-Governor Dunsmuir of British Columbia, was recently launched there, and arrived at Quebec during the tercentenary celebrations, after which she will proceed to Vancouver by Cape Horn.

The Willow River Timber Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $250,000 and office at Vancouver, B.C., to deal in timber and lumber, and in connection therewith to build, purchase or otherwise acquire and operate steam and other vessels.

A company is in course of formation at Vancouver for the construction of a floating dock there. Some British capital is said to be interested in the scheme, which it is anticipated will be granted a subsidy under the new act relating to subsidies for dock construction throughout Canada.

The Alaska Transportation and Trading Co., Ltd., has been incorporated under the British Columbia Companies Act, with a capital of $60,000, and office at Victoria, B.C., to build, acquire, and operate works of all kinds necessary and convenient for the purposes of transportation and trading.

A public meeting at Vancouver, July 9, passed a resolution appointing a committee to obtain information, and to take steps to bring before the Dominion Government, the necessity of developing the port of Vancouver, and the desirability of making it a free port, and that such development should be a national undertaking.

The Nimpish Lake Logging Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $400,000, to take over the properties of Stracey and Garland, Ltd.; to carry on the business of lumbermen, etc., and to construct, acquire and operate steam and other vessels, wharves, docks, piers, tramways, logging railways, etc., in connection therewith.

The Johnson Wharf Co., Ltd., has recently constructed a wharf at Vancouver, 750 ft. long from shore end to end of pier, 100 ft. wide, with an L on the shore end 150 by 80 ft. The main shed is 400 by 75 ft., clear without obstructions. The depth of water at the shore end of the main building is 20 ft. at low tide, and at the outer end of the wharf, 40 ft. C. Gardiner Johnson, Lloyd's Agent, is Managing Director of the company.

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SUBMARINE SIGNALS

Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says:

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BOSTON, MASS.

The arrangements for the incorporation of a shipping and general freighting, towage, wharfage, coal and general business company are proceeding. Among those interested are: J. H. Greer, owner of several steam tugs; B. W. Greer, until recently General Freight Agent C.P.R. Pacific Division at Vancouver, and now Manager Johnson Wharf Co., Ltd., Vancouver; and G. L. Courtney, until recently District Freight Agent C.P.R. at Victoria. J. H. Greer was the originator of the present Canadian-Mexican Line, now under the management of G. T. Symons & Co. It is said that business will be opened in Victoria, Vancouver and Prince Rupert, where wharves, etc., are being acquired, and a press report states the s.s. Leenalaw is to be chartered. The Leenalaw is a U.S. vessel, built at Newcastle-on-Tyne, Eng., in 1886, having triple expansion engines of 1,800 i.h.p., with cylinders 22, 35, and 58 ins. diam., by 42 ins. stroke; her dimensions are: Length, 280.5 ft.; breadth, 36.2 ft.; depth, 23 ft.; tonnage, 1,924 gross, 1,496 register.

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Notices to Mariners.

The Dominion Department of Marine has issued the following notices:

No. 52. June 25.—136. British Columbia, Strait of Georgia, Discovery passage, Cape Mudge, light improved. 137. British Columbia, Trincomali channel, Walker rock, Wigham light replaced by gas-lighted beacon. 138. British Columbia, Milbank sound, Seaforth channel, Ivory island, Surf point, fog alarm established. 139. British Columbia, Queen Charlotte islands, Graham island, west coast, rock southward of Frederick channel.

No. 53. June 26. 140. British Columbia, Vancouver island, Discovery passage, Chatham point, gas and bell beacon established.

No. 54. June 27.—141. New Brunswick, Bay of Fundy, Grand Manan island, Swallowtail, change in character of light. 142. New Brunswick, south coast, Bay of Fundy, Chignecto channel, Cumberland basin, Peck point, description of light. 143. Nova Scotia, Cape Breton island, Gut of Canso, McMillan point, hand foghorn at light station. 144. Newfoundland, south coast, Fortune bay, St. Jacque island, lighthouse established. 145. Newfoundland, east coast, Trinity bay, Trinity harbor, Fort point, change in character of light.

No. 55. June 29.—146. Ontario, Lake Superior, Point Porphyry, fog alarm established. 147. Ontario, Lake Superior, Thunder bay, Welcome islands, fog alarm established.

No. 56. July 2.—148. New Brunswick, south coast, Bay of Fundy, Cape Spencer, fog alarm established.

No. 57. July 3.—149. New Brunswick, Northumberland Strait, Richibucto harbor entrance, changes in lights on south beach, range lights established on north beach.

No. 58. July 8.—150. Quebec, River St. Lawrence, Beaujeu bank, channel being dredged, changes in buoyage; Goose Island, range lights established.

No. 59. July 9.—151. Quebec, Ottawa River, Lake of Two Mountains, Oka wharf, light pole replaced by tower. 152. Ontario, Lake Erie, Port Stanley, substructure of extension of breakwater completed in length.

No. 60. July 16.—153 General, Canadian list of lights and fog signals, new edition. 154. Newfoundland, Labrador, Belle Isle, south end, temporary light 155. Isle of Man, east coast, Douglas Head, fog signal established.

No. 61. July 17.—156. Quebec, Gulf of St. Lawrence, Anticosti Island, Heath Point, lighthouse tower increased in height, intended change in character of light. 157. Newfoundland, west coast, Gulf of St. Lawrence, Rich Point, intended change in character of light. 158. Newfoundland, west coast, Cape Anguille, intended light and fog alarm.

No. 62. July 18.—159. Ontario, Lake Ontario, Cobourg harbor, range lights established. 160. Ontario, Lake Ontario, Cobourg harbor, middle pier damaged, temporary light.

No. 63. July 20.—161. British Columbia, Vancouver Island, west coast, Estevan Point, fog alarm established. 162. British Columbia, Active Pass, Mayne Island, Helen Point, gas and bell beacon established.

The following notices have been issued by the U.S. Hydrographic Office:

No. 28. July 11.—1133. St. Mary's River, Bayfield Rock, buoy discontinued. 1144. Chesapeake Bay, Potomac River mouth, St. Mary's River and Smiths Creek, buoys to be established.

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Canadian Coasting Regulations.

On July 4 the Minister of Finance gave notice that he would move the following resolution in committee of the whole in the House of Commons:

"Resolved, That it is expedient to amend the Canada Shipping Act, chap. 113, Revised Statutes of Canada, 1906, by repealing sec. 958 and substituting therefor: '958. The Governor-in-Council may from time to time,

'(*a*) by order-in-council declare that the foregoing provisions of this part shall not, while such order-in-council is in force, apply, either throughout Canada or in any specified waters of Canada, to the ships or vessels, or to any specified ascertained or ascertainable class or number of the ships or vessels of any foreign country in which British ships are admitted to the coasting trade of such country, and to carry goods or passengers from one port or place to another in such country; and

'(*b*) revoke or vary such order-in-council.

'2. That the act founded on this resolution shall not come into force until his Majesty's pleasure thereon has been signified by publication in the *Canada Gazette*.'"

Sec. 958 of the Canada Shipping Act, which is to be amended as above, reads as follows: "The Governor-in-Council may from time to time declare that the foregoing provisions of this part shall not apply to the ships or vessels of any foreign country in which British ships are admitted to the coasting trade of such country and to carry goods and passengers from one port or place to another in such country."

"The foregoing provisions of this part," referred to in sec. 958, provide that no foreign built British ship, whether registered in Canada or elsewhere as a British ship, shall after Sept. 1, 1902, engage or take part in the Canadian coasting trade unless it has first been licensed by the Minister of Customs, who shall issue such license on application and upon the payment of 25% duty on the fair market value of the ship. It is also provided that no goods or passengers shall be carried by water from one port of Canada to another except in British ships.

On Jan. 13, 1907, an order-in-council was passed repealing after Jan. 1, 1909, various orders-in-council under which the ships of Italy, Germany, the Netherlands, Sweden, Norway, Austria-Hungary, Denmark, and the Argentine Republic were admitted to the Canadian coasting trade on the same terms as Canadian vessels, and declaring that after Jan. 1, 1909, the vessels of those countries should not carry any goods or passengers by water from one port of Canada to another. The effect of the Minister of Finance's resolution, and the act founded on it, will be that the Government may again extend Canadian coasting privileges to Norwegian and other vessels among others, and is an entire reversal of the policy put into effect in January last. In speaking in the Commons on July 10, the Minister of Finance said that the amendment was intended only to provide for allowing certain classes of Norwegian vessels to continue their present operations in the carriage of coal down east and for a limited time.

In an interview which a deputation of the Dominion Marine Association had with the Minister of Customs on July 4, he claimed that Canadian vessel owners monopolized the coasting trade. Members of the deputation pointed out that this was not the case, and that correspondence on file in the Department showed the necessity for amendment to the coasting laws to conform to those of the U.S., and to prohibit the carriage of goods in anything but British bottoms over any part of the route. At present grain is permitted to be brought in U.S. vessels from Fort William, Ont., to Sarnia, Ont., via Port Huron, Mich., the passage of the river being made in cars. Other violations of a similar nature, which occur in other lines as well, were pointed out, and the Minister promised to have the law amended to conform to the U.S. statute.

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie canals in June:

Articles.			Canadian Canal	U.S. Canal	Total
Copper	Eastbound	Net tons	1,727	11,493	13,220
Grain	"	Bushels	875,979	1,050,759	1,926,738
Building stone	"	Net tons	....	....	....
Flour	"	Barrels	121,704	378,125	499,829
Iron ore	"	Net tons	460,300	2,009,248	2,469,548
Pig iron	"	"	....	1,400	1,400
Lumber	"	M. ft. B.M.	4,662	68,611	73,273
Wheat	"	Bushels	3,412,814	2,246,849	5,659,663
General merchandise	"	Net tons	5 606	4,740	10,346
Passengers	"	Number	1,245	1,754	2,999
Coal, hard	Westbound	Net tons	74,088	145,765	219,853
Coal, soft	"	"	247,535	841,338	1,088,873
Flour	"	Barrels	....	....	....
Grain	"	Bushels	....	....	....
Manufactured iron	"	Net tons	16,108	18,638	34,746
Iron ore	"	"	....	....	....
Salt	"	Barrels	6,874	29,507	36,381
General merchandise	"	Net tons	38,997	58,109	97,106
Passengers	"	Number	2,054	1,430	3,484
Vessel passages		Number	688	1,264	1,952
Registered tonnage		Net	952,813	2,445,375	3,398,188
Freight—Eastbound		Net tons	610,673	2,277,523	2,888,196
" Westbound		"	377,711	1,068,276	1,445,987
Total freight		"	988,384	3,345,799	4,334,183

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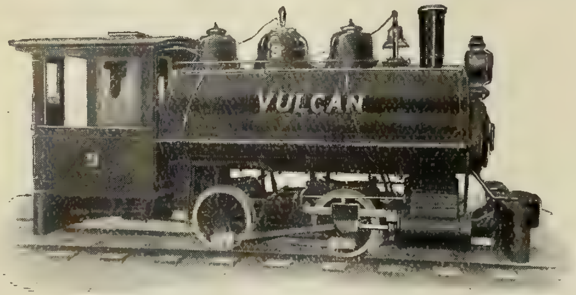

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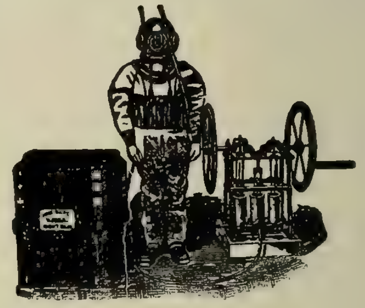

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152 Craig St. West, MONTREAL

RAILWAY SPRINGS

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Street Railway Springs
from the largest to the smallest

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OF CANADA

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Sterling exchange bought and sold. Letters of credit issued available in any part of the world.

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A general Banking business transacted.

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Provinces of Ontario, Quebec, Manitoba, Saskatchewan, Alberta and British Columbia.
HEAD OFFICE - - TORONTO

International Mercantile Marine Co.

The report for the year ended Dec. 31, 1907, shows: Gross earnings, $39,266,588; operating and general expenses, $32,242,542; net earnings, $7,024,046; as compared with $37,159,212 gross earnings; $29,155,178 operating and general expenses; $8,004,034 net earnings, for 1906. Excess premiums and interest credited to the insurance fund, $441,661; against $791,959 for 1906; and profit on bonds for the sinking fund, $57,021; against $28,597 for 1906, added to the net earnings, show total net profits of $7,522,728, against $8,824,590 for 1906. Interest and discount on bonds, interest on loans, and income tax in Great Britain, $3.488,997 against $3,795,836 for 1906; thus showing a surplus of $4,033,731, against $5,028,754 for 1906. The total surplus shown is $4,312,637, against $5,278,906 for 1906. Of this surplus $4,000,000, as against $5,000,000 for the previous year, has been applied to depreciation, and the balance taken to profit and loss.

ASSETS.

Cost of properties	$173,011,332
Investments	13,012,058
Cash with trustees	25,461
Inventories	892,196
Accounts receivable	2,556,153
Bills receivable and loans	1,208,538
Interest received and accrued	12,906
Advances and current accounts	425,505
Agency balances	155,525
Stocks and bonds	599,811
Cash	577,623
Deferred charges	2,014,792
	$194,471,900

LIABILITIES.

Preferred stock	$ 51,730,971
Common stock	49,931,735
Stocks of constituent companies outstanding	1,697
Bonds and debentures	72,684,130
Loans on mortgages	707,671
Loans and bills payable	539,256
Accounts payable	3,449,581
Agency balances	211,316
Interest accrued	1,006,072
National Line's current account	54,036
Reserves	395,053
Deferred credits	2,095,454
Insurance fund	1,000,000
Depreciation fund	10,352,291
Surplus, Dec. 31, 1907	312,637
	$194,471,900

The President, J. Bruce Ismay, in his report, states that all the company's property has been well maintained. The building scheme as outlined in the 1906 report is being actively carried out, and it is expected that the first new steamship for the St. Lawrence trade will be ready early in 1909, and the second one by June in the same year. At the annual meeting of shareholders the retiring directors were re-elected for the current year.

Cost of Government Vessels.

The cost of construction, or the purchase price of the vessels added to the Dominion fleet of steamships, etc., since 1900, was given by the Minister of Marine in answer to a question in the House of Commons recently. The list of vessels, etc., is as follows:

Lady Grey, built in Great Britain	$207,507.83
Druid, built in Great Britain	110,960.00
Lady Laurier, built in Great Britain	184,933.33
Canada, built in Great Britain	215,600.00
Montcalm, built in Great Britain	265,233 33
Champlain, built in Great Britain	90,033.33
Arctic, purchased from German government	75,000.00
Maisonneuve, purchased and built in Canada	8,500.00
Princess, purchased in Canada, built in Great Britain	45,000.00
Falcon, purchased and built in Canada	9,000.00
Kestrel, built in British Columbia	63,920.00
Vigilant, built in Toronto	143,900.00
Lurcher Anticosti, built in Toronto	179,950.00
Lillooet, built in British Columbia	143,000.00
Bayfield, purchased in Canada	50,000.00
Galveston, purchased in Great Britain	£30,000.00

The following were built by the Department of Marine at the Government shipyard, Sorel, Que.:

Lafontaine, ladder dredge	$ 95,172.35
Progress, dipper dredge	55,000.00
Fielding, ladder dredge	425,579.81
De Beaujeu, suction dredge	501,477.45
Champlain, tug	18,209.93
Frontenac, inspection steamer	50,117.51
De Lévis, inspection steamer	44,304.28
Lac St. Pierre, tug	26,777.07
Montcalm, tug	25,675.41
Portneuf, tug	20,765.89
Rouville, lighthouse steamer	85,925.50
Vercheres, lighthouse steamer	29,344.30
Hosanna, tug	21,383.80
James Howden, tug	36,350.29
Annette, tug	4,146.47
Marie, launch	1,787.31

The Minister added that there was at present under construction in Great Britain an icebreaking steamer for service between Prince Edward Island and the mainland, the contract price for which was £103,000. A contract had been entered into with Swan, Hunter and Wigham Richardson Co., of Newcastle-on-Tyne, England, for a lighthouse tender for the Georgian Bay, and there was under construction at the Government yard, Sorel, Que., a vessel for the lighthouses on Lakes Erie and Ontario. The Department of Marine did not at present contemplate the construction or purchase of any further or additional vessels. The Government was desirous of encouraging the building of vessels in Canada, and with this in view has had several vessels built at its own and at private yards. It would alway give the preference to Canadian over foreign yards when the same could be done with due regard to economy and efficiency.

The Postmaster-General stated that his Department had in 1907 purchased in Great Britain the Deerhound (now the Lady Evelyn), for £12,500, as a mail tender at Rimouski, Que., and the Minister of Public Works said the list did not include tugs, barges and small vessels of that nature built or purchased by that Department, as he did not think information about them was required

A contract has been let to the Reid Wrecking Co., Sarnia, Ont., for the raising of the Turret Bell and the Lady Eileen, both of these steamships being wrecked on the Atlantic coast. The former has been lying there for about two years, while the latter is a recent wreck, and both have been abandoned to the underwriters.

The Cornwall Canal was reopened for traffic July 10. A cut was made on the north side, of sufficient width and depth to allow of the passage of vessels, but for safety these were towed through. The work, which was carried out under the superintendence of J. L. Weller, Superintendent of the Welland Canal, has been expeditiously done, the delay to shipping having been reduced to a minimum.

The proposal to place the St. John, N.B., harbor under a commission has taken concrete form in the shape of a bill to be promoted with that object. The draft bill has been approved by the city council and forwarded to the Minister of Public Works. It is not anticipated that the commission can be formed and take over the harbor until 1910, and in the meantime steps will be taken to increase the facilities generally.

A bill to amend the Canada Shipping Act has been passed by the House of Commons, and assented to, July 20. The bill provides for the prevention of the duplication of ships' names; the admission to Canadian marine examinations of citizens of any country where there is not a similar reciprocity; and it compels vessels navigating the channel between Montreal and Quebec to carry a pilot. The Minister of Marine stated that temporary certificates would be issued to engineers on vessels with engines up to 14 h.p., of the compound type, instead of 9, as at present.

Marine Votes for 1908.

In addition to the amounts given on pg. 373 of our May issue, the Dominion Parliament has voted the following sums for various services connected with the marine interests. The votes have been made in connection with the Department of Railways and Canals, Public Works, Marine and Fisheries and Trade and Commerce, and include sums voted on capital account.

Hydrographic surveys	$ 21,250.00
Marine hospitals and sick and distressed seamen	6,625.00
Steamboat inspection	5,937.50
Fisheries protection service	31,250.00
To provide for construction of a fishery protection cruiser, Pacific coast	28,125.00

LIGHTHOUSE AND COAST SERVICE.

Salaries and allowances	$ 37,500.00
Agencies, rents, etc	4,125.00
Maintenance and repairs, lighthouses	81,250.00
Repairs to lightships	2,500.00
Maintenance, etc., of dockyards	5,000.00
Lighthouse construction and equipment and provision of boats	157,500.00
Further amount required for lighthouse tender on Great Lakes	18,750.00
Icebreaking in Thunder Bay	5,000.00
Wireless telegraph service	16,443.75
Signal service, additional telephone lines, etc	11,562.50

MAIL SUBSIDIES AND STEAMSHIP SUBVENTIONS.

Great Britain and Canada	$ 68,750.00
Other trans-Atlantic services	16,187.50
Canada and South America	10,087.50
Canada and South Africa	18,250.00
Canada and Mexico	12,500.00
Canada and New Zealand	6,250.00
Various services on the Atlantic Ocean, St. Lawrence and in Ontario	20,599.50
Various services on the Pacific coast	2,843.75

HARBORS AND RIVERS.

St. John, N.B., improvements, repairs and dredging	$ 350,000.00
Summerside, P.E.I., breakwater	37,500.00
Quebec harbor improvement	62,500.00
Sorel, Que., deepwater wharf	37,500.00
Toronto " "	15,000.00
Port Colborne, " "	2,500.00
New Brunswick, harbor and river improvements at 26 points	129,037.50
Quebec, harbor and river improvements at 84 points	487,200.00
Port Arthur and Fort William, Ont., harbor and river improvements	62,500.00
Red River, Winnipeg, improvements at St. Andrew's Rapids	37,500.00
Generally	1,250.00
" in Nova Scotia	22,500.00
" in Prince Edward Island	6,000.00
" in Maritime Provinces	2,500.00
" in North-West Territories	625.00
" to purchase creosoted timber	15,000.00
Improvements and repairs to wharves, piers and other harbor and river works at 16 points in Prince Edward Island	51,195.00
do. at 123 points in Nova Scotia	1,228,460.00
do. at 90 points in Quebec	89,523.00
do. at 52 " Ontario	104,552.00
do. at 5 " Manitoba	3,687.00
do. at 4 " Sask. and Alta	4,500.00
do. at 14 " Brit. Columbia	21,000 00
Improvements on Lewes and Yukon Rivers	937.50

DREDGING.

Repairs to plant, generally	$ 14,375.00
New plant, generally	37,500.00
" Maritime Provinces	12,500.00
" Ontario and Quebec	13,750.00
" Manitoba	1,875.00
" British Columbia	12,500.00
Dredging, general service	625.00
" Maritime Provinces	37,500.00
" Ontario and Quebec	46,875.00
" Manitoba	3,750.00
" British Columbia	9,375.00

CANALS.

Quebec Canals.—Steam road roller and stone crusher	$ 875.00
Re-marking boundaries, surveys, etc	1,250.00
Dredging	2,312.50
Lachine Canal — Rebuilding slope walls	29,843.75
Building wharves and basins	37,500.00
Testing cement	312.50
Walls at basin no. 2	18,375.00
Workshops	1,875.00
Beauharnois Canal.—Improvements	1,250.00
Soulanges Canal.—Improvements	2,287.50
Chambly Canal.—New power house at bridge weir 2	625.00
St. John's harbor improvements	6,750.00
Sundry works at St. John's, Ste. Therese and other points	4,437.50
Carillon and Grenville Canal.—Sundry works	1,800.00
Cornwall Canal.—Sundry works and repairs	3,757.50

THE CLIFTON HOTEL

NIAGARA FALLS, CANADA.

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Arriving on Michigan Central Rd , Canadian Pacific Railway, at Victoria Park station—Hotel bus meets all trains, only three minutes' walk from station to hotel.

International Railway (trolleys), connecting with Niagara Navigation Co. steamers at Queenston, to or from Toronto, pass the door.

IMPORTANT

Guests coming to the Hotel should see to it that they are taken to The Clifton Hotel, CANADIAN SIDE, and also that their mail is addressed "Care of The Clifton Hotel, Niagara Falls, CANADA." To insure prompt delivery, don't forget to make CANADA plain in the address.

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NOS. 346 and 348 BROADWAY, N.Y. CITY, U.S.A.

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Montreal, Que. Ottawa, Ont. Quebec, Que.
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C.P.R. LANDS

THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00	to	$15.00	per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00	to	25.00	per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00			" "
Map No. 5—South-Western Alberta	8.00	to	15.00	per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00	to	25.00	per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00	to	25.00	per acre.

All prices are subject to change without notice

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160 Acres	at	$ 8.00	per acre,	cash payment	$191.70	first year's interest	$65.28	and	nine instalments of	$160.00
"	"	9.00	"	"	215.70	" " "	73.46	"	"	180.00
"	"	10.00	"	"	239.70	" " "	81.62	"	"	200.00
"	"	11.00	"	"	263.60	" " "	89.78	"	"	220.00
"	"	12.00	"	"	287.60	" " "	97.96	"	"	240.00
"	"	13.00	"	"	311.55	" " "	106.10	"	"	260.00
"	"	14.00	"	"	335.60	" " "	114.32	"	"	280.00
	"	15.00	"	"	359.50	" " "	122 44	"	"	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

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SOLE AGENT IN CANADA FOR

"NOVO" "INTRA" CRUCIBLE STEEL

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"DILLON" HINGE-STAY FENCE

MANUFACTURED IN THREE WEIGHTS AND VARYING FROM FOUR WIRES 36" HIGH TO TWELVE WIRES 58" HIGH

All Strands are HIGH CARBON HARD Steel Wire

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FOR RAILWAYS, TRAMWAYS, GIRDERS, ETC.

LOCOMOTIVES, CARS, AND OTHER EQUIPMENT.

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St. Lawrence Canals.—Districe offce.$	875.00
Galops Canal.—Upper entrance, final estimate	825.00
North channel and cut dam between Les Galops and Adams Island, final estimate	5,108.75
Retaining walls, etc	1,125.00
Rapide Plat Canal.—Concrete super structure, south entrance	125.00
Murray Canal.—Sundry works	3,750.00
St Lawrence River.—Removal of shoals in river, upper entrance to Galops canal	2,513.50
Rideau Canal.—Improvements	562.50
Trent Valley Canal.—Construction	125,000.00
Improvements	5,625.00
New lock and dam, Lindsay	10,000 00
Dam at Buckhorn	3,125.00
New dredge	1,875.00
Welland Canal.—Electric lighting and power plant	6,250.00
Rebuilding centre piers and bridges at Queenston St. and Homer road	3,750.00
Making survey of canal	2,500.00
Widening canal at Welland	6,875.00
Port Colborne, improvements	14,375.00
Sundry improvements and repairs	18,687.00
Renewing piers, Port Maitland	12.500.00
Sault Ste. Marie Canal —Construction	13,125.00
New lock gates	2,500.00

Statistics of Canadian Shipping.

The Shipping List for 1907, recently published by the Marine Department, gives the total number of vessels of all kinds on the register at Dec. 31, 1907, as 7,528, measuring 698,688 tons, an increase of 16 vessels, and 44,509 tons over 1906. The number of steam vessels on the register is given as 3,007, with a gross tonnage of 471,795 tons, which, at the assumed average value of $30 a ton, represents a total value of $20,960,640. During the year, 392 vessels of 38,410 tons register, were built and registered in Canada; and 452 vessels were removed from the register, owing to transfers, wreckings, and to being broken up. A marked decrease has been noticed of late years in the tonnage of registered Canadian shipping, but it is pointed out that the decrease has in reality not been so large as the statistics would indicate. Many vessels were allowed to remain on the register, though they had ceased to exist, but these have now been removed, and care is taken now that the lists are kept clear of such. Of the 452 vessels removed from the register during the year, 21 were sold to foreigners, 56 wrecked, 19 stranded, 53 lost, 197 broken up, 5 abandoned, 4 collision, 2 missing, 13 foundered, 20 burnt, 8 condemned, 39 transferred to Newfoundland, 18 transferred to West Indies, 2 transferred to Great Britain, and 5 were due to other causes. During the same period the names of 20 vessels were changed by orders-in-council.

Following is a summary of the number of vessels and their tonnage by provinces:

	Sailing ships and steam'rs	Steam's	Gross tonnage of steam's	Net tonnage of sailing ships and steam's
Ontario	2,011	1,465	179,229	184,328
Nova Scotia	2,074	232	30,448	173,950
Quebec	1,338	420	112,914	166,133
British Columbia	872	582	76,648	83,792
New Brunswick	927	173	56,923	69,463
P. E. Island	145	17	4,110	9,815
Manitoba	144	104	8,200	8,247
Yukon District	13	11	3,042	2,670
Saskatchewan	4	3	281	290
Grand total	7,528	3,007	471,795	698,688
Total, 1906	7,512	2,810	375,263	654,179

The ports of registry are distributed as follows: Ontario, 38; Nova Scotia, 21; Quebec, 6; British Columbia, 3; Prince Edward Island, Manitoba, Yukon District and Saskatchewan, 1 each. In Alberta no provision has as yet been made for the registration of vessels.

The ports having a net tonnage of 10,000 tons and above, are:

	Vessels		Net
	Sailing	Steam	tonnage
Montreal, Que	396	251	119,887
St. John, N.B	236	98	54,512
Victoria, B.C	114	142	46,465
Quebec, Que	474	159	40,811
Windsor, N.S	77	13	34,365
Toronto, Ont	81	307	33,765
Ottawa, Ont	158	244	32,286
Vancouver, B.C	106	340	27,040
Lunenburg, N.S	274	10	23,749
Halifax, N.S	329	84	21,222
Parrsboro, N.S	90	6	20,199
Kingston, Ont	60	135	17,817
Yarmouth, N.S	289	28	17,005
Collingwood, Ont	3	77	11,932
Maitland, N.S	23	1	11,349
St. Catharines, Ont	37	59	10,426
New Westminster, B.C	70	100	10,287
Midland, Ont	2	22	10,161

The largest vessels on the register are:

STEAM.

Name	Port of Registry	Tonnage Gross	Reg.	H.P.
Midland Prince	Collingwood, Ont	6,636	5,142	136
Ontario No. 1	Montreal, Que	5,146	3,229	293
Collingwood	Collingwood, Ont	4,529	3,480	163
Bessie Dollar	Victoria, B.C	4,329	2,798	244
Hazel Dollar	" "	4,304	2,804	241
Montreal	Montreal, Que	4,282	2,299	386
M. S. Dollar	Victoria, B.C	4,216	2,674	202
W. D. Mathews	Toronto, Ont	3,965	2,450	151
Assiniboia	Montreal, Que	3,880	2,486	299
Keewatin	" "	3,865	2,470	298
Agawa	Sault Ste. Marie, Ont	3,759	2,468	151
Himera	St. John, N.B	3,606	2,351	303
Trebia	" "	3,586	2,343	303
Sellasia	" "	3,474	2,263	303
Eretria	" "	3,464	2,255	303
Albuera	" "	3,460	2,258	303
Quebec	Montreal, Que	3,454	1,985	120
Pontiac	Pictou, N.S	3,345	2,072	343
Huronic	Collingwood, Ont	3,330	2,211	245
Pandosia	St. John, N.B	3,326	2,165	290
Tanagra	" "	3,317	2,159	290
Cheronea	" "	3,189	2,060	294
Cunaxa	" "	3,125	2,048	294
Leuctra	" "	3,027	1,950	290

SAILING.

Name	Port of Registry	Rig.	Reg. tonnage
Lord Wolseley	Victoria, B.C	Barge	2,454
Everett G. Griggs	" "	Bktn	2,351
Canada	Windsor, N.S	Ship	2,137
Kings County	" "	"	2,061
Lord Templetown	Victoria, B.C	Bk	2,048

In 1906 there were only 7 steam vessels on the register over 3,000 tons gross, whereas in 1907 the number has increased to 24. This increase was chiefly the result of the transfer from the British register of the Thomson Line Steamships, consisting of 10 vessels, aggregating 33,574 gross tons. The Agawa, formerly a barge, has been rebuilt and engined.

The new vessels built during the year are as follows, by provinces:

	Vessels	Tons
Ontario	96	14,444
Quebec	50	10,326
British Columbia	97	7,115
Nova Scotia	109	5,116
New Brunswick	27	909
P. E. Island	7	215
Saskatchewan	3	201
Manitoba	3	84
Yukon District	...	.....
Total	392	38,410
Total for 1906	397	21,741

The names, dimensions, etc., of these vessels were published in our columns from month to month during 1907, and lists of vessels registered during the current year are appearing monthly, and also the names of vessels removed from the register, together with the causes of removal.

Vessels Removed from the Register.—The following vessels have been removed from the Canadian register for the reasons assigned: Steam—Victoria, Winnipeg, 15 tons, broken up; Worlock, Victoria, B.C., 39 tons, sold to foreigners; Sailing—Cambridge, Halifax, N.S., 43 tons, lost; Fisher River, Winnipeg, 110 tons, broken up; Edith R. Balcom, Lunenburg, N.S., 100 tons, wrecked; F. L. Danforth, St. Catharines, Ont., 643 tons, wrecked; George R. Alston, Lunenburg, N.S., 99 tons, transferred to Newfoundland; Low Wood, St. John, N.B., 1,091 tons, condemned; Pansy, St. John, N.B., 76 tons, wrecked; Strathern, Maitland, N.S., 1,272 tons, abandoned at sea; Swanhild, Halifax, N.S., 52 tons, transferred to Newfoundland; Venturer, Liverpool, N.S., 318 tons, wrecked.

Georgian Bay Canal Surveys, Etc.

An interim report and estimate on the proposed canal from Georgian Bay to Montreal, by A. St. Laurent, Engineer in charge, was submitted to the House of Commons, July 6, by the Minister of Public Works.

The estimates are based on a project for a waterway at least 22 ft. deep. The style of navigation proposed is known as the dam and lock system, with slack water reaches between structures. The whole is designed on such lines as to enable boats of large size (600 x 60 x 20 feet draught) to pass from Lake Huron to Montreal, the head of ocean navigation. The project is essentially a river and lake canalization scheme, taking advantage of natural channels, which can be made to form 80% of the distance. Of the many miles of projected navigation between the above mentioned points, from 410 to 420 miles follow the course of some river or lake. For that part of the route from Georgian Bay to the height of land separating the watersheds of the Ottawa River and the Great Lakes, 81 miles, the French and Pickerel Rivers and Lake Nipissing are utilized. From Lake Nipissing, through the height of land, 3½ miles, the route is an artificial waterway, with the exception of a few small lakes through which it is located. This artificial cut leads into Trout Lake, thence into Turtle Lake, the Little Mattawan River, and Talon Lake, which is utilized as far as Sand Bay, at its southern end, 21 miles. Trout and Talon Lakes referred to above are very deep and fairly large bodies of water. From Sand Bay there is a canal for 3 miles to the Mattawa River, which is utilized as far as Mattawa, 13 miles, where another canal cut of ¾ mile in length makes an entrance into the Ottawa River. This river, which expands into large and deep lakes in many places, is followed all the way down to the foot of the Lake of Two Mountains, 293 miles. From the foot of Lake of Two Mountains to Montreal, 25 miles, either the St. Lawrence River or the portion of the Ottawa River called Riviere des Prairies flowing north of Montreal Island, may be utilized. The former route is 5 miles of artificial waterway and the latter about 11 miles. By the first route the canal enters Montreal harbor at its upper end. By the second route the St. Lawrence ship canal is joined at Bout de l'Ile, some 11 miles below the eastern boundary of Montreal harbor. From Port Arthur or Fort William, Montreal via the proposed waterway is 934 miles; via Lake Erie and the Welland Canal, 1,216 miles; via Buffalo and the Erie Canal to New York, 1,358 miles, giving a difference in favor of the projected route of 282 miles, as compared with the present St. Lawrence route and of 424 miles as compared with the Buffalo and New York route. Comparing the distance from Fort William to Liverpool via New York, we have: Fort William to Liverpool via Georgian Bay Canal, 4,123 miles; Fort William to Liverpool via New York, 4,929; a difference of 806 miles in favor of the Georgian Bay Canal-Montreal route. With the advantage of shorter distance between terminal harbors it is computed that the route will be from

1-3/5 to two days faster than any other existing water route under present conditions from the head of the Great Lakes to an ocean port, apart from also having an enormous superiority as to carrying capacity. But as compared with the possible improved system of St. Lawrence canals to a depth of 22 ft., assuming that the number of locks would be greatly reduced, probably no practical benefit in the time of transit could be claimed, the saving in distance being offset by the longer stretches of lake and wide river navigation which exist through the Lake Erie and Lake Ontario route, where higher speed would be permissible.

The total length of what may be termed canal cutting for the entire route is about 28 miles, by the project connecting the St. Lawrence River above Montreal, through Lake St. Louis; and 34 miles should the Riviere des Prairies route be selected. The length of submerged channels to be excavated is about 60 miles, in stretches of varying lengths. Apart from this is an aggregate of 14¼ miles where obstructions such as shoals, sharp bends, etc., have only to be removed to form very wide channels. Therefore, of the 440 miles constituting the waterway, 108 miles will require excavation work for locks, approaches, canals, submerged channels, etc., leaving 332 miles of natural river or lake channels, which will not require any improvement beyond the raising of the water surface, as recommended in connection with the project. Taking into account the 14½ miles of obstructions which, after removal, will leave wide free channels, the route may be subdivided as follows, in relation to width:

	Miles.
Canal cuts, 200 to 300 ft. wide, including necessary restrictions at locks	28
Improved channels, submerged sides, 300 ft. wide	66
Free channels, 300 to 1,000 ft. wide and over	346
Total	440

The relative length of canals and submerged channels may be varied slightly, as it is an open question as to the exact point where the one ends and the other begins. The sides of all submerged cuts will be shown by piers or clusters of piles at suitable distances to indicate the channel and to aid the vessels in navigating. Along curves these piers will be provided and each different course will be defined by ranges. The restricted channels will be widened at all bends and conditions for navigation in these restricted parts will be as good, it is expected, as on the St. Mary's River or the St. Clair and Detroit River channels.

The depth of 22 ft. selected for the waterway will more than equal the conditions as they exist to-day in the channels connecting the waters of the Great Lakes, the St. Mary's River, Hay Lake, St. Clair Flats canal, and the Detroit River. The improvement carried out for these lake channels, since 1892, contemplated a depth of 20 ft. below the mean water surfaces, as determined up to that time. Since then, however, the prevailing water levels of Lakes Huron, St. Clair and Erie have been almost continuously below the mean stage as formerly determined, and in consequence the actual draught available on account of lake fluctuations has been only from 17 to 19 ft. It has therefore been found necessary to extend this depth, and some of these channels are now being deepened to 21 and 22 ft. in order to obtain a safe 20-ft. draught at all times. The Georgian Bay ship waterway, therefore, with a minimum depth of 22 ft., will compare favorably with any of the channels above mentioned which govern the draught of boats on the Great Lakes. The mileage of excavation in canals and channels for the route may be subdivided as follows for each class of material encountered: Dry excavation—rock, about 25 miles; earth, about 13 miles; mixed earth and rock, about 20 miles; total, 58 miles. Wet excavation—rock, about 18 miles; earth, 16 miles; mixed earth and rock, 16 miles; total, 50 miles; grand total, 108 miles. This mileage includes all points which are to be dredged or excavated, whether canal cuts, submerged channels or shoals. A small percentage of the excavation given as submarine rock work, might possibly be done in the dry, and the cost therefore reduced. In the estimates when doubt existed, the rock excavation has been invariably classified as wet rock.

As the Montreal harbor forms the eastern terminus of the waterway, no special provision is made in the estimates for increased terminal facilities. By the time the water-

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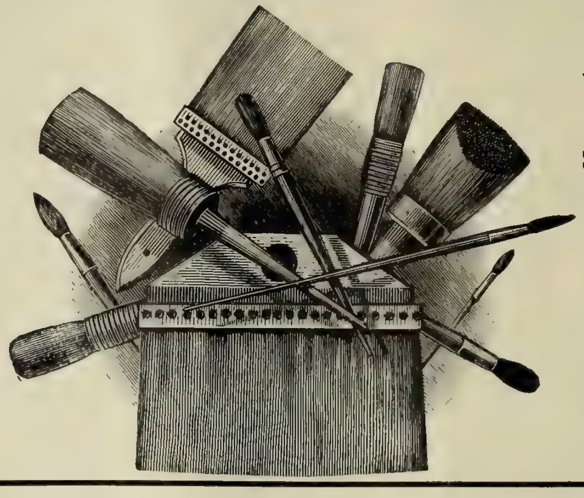

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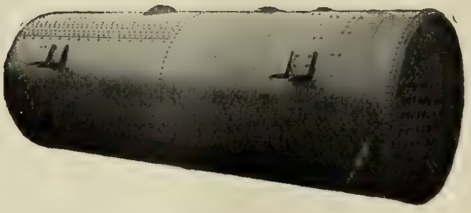

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way is completed, with the works now under construction and the extensive improvements proposed, the harbor will no doubt afford sufficient dockage facilities to meet the requirements of the increase in traffic contributed by the new route. As this traffic develops, facilities will be extended naturally as part of the harbor works. The western entrance to the waterway on Georgian Bay is formed by French Harbor. As this will be only a transit point to and from terminal harbors already established, no terminal facilities are required other than improvements in certain parts of the entrance, and increased aids to navigation. These improvements are included in the estimate. The summit level embraces Lake Talon, the Little Mattawan River, Turtle and Trout Lakes, their present surfaces being raised to elevation 677. Talon Lake will be raised 41 ft., and Trout and Turtle about 15 ft. above their present level. The locks at both ends of the summit are designed to allow of the large lake thus created being lowered to elevation 671, without interfering with navigation. In fact, besides affording a wide and unobstructed route for shipping in transit, the lake will have two important duties: to absorb in part the excess in floods and to store the reserves for the months of deficient water supply. From the careful hydraulic investigations made, the available supply from the summit watershed, with the storage provided, will be 540 cu. ft. per second throughout the season of navigation, which will allow of an average of 24 passages a day, or 5,040 passages for the navigation season. As the traffic develops, in the event of this supply being insufficient to meet the demand upon the summit, the supply can be augmented by 700 cu. ft. a second by creating storage reserves at the head of the Amable du Fond River, and diverting it from the present outlet into the Summit Lake. This can be accomplished at an expenditure of $900,000.

From investigations made the opening and closing of navigation for the waterway would coincide closely to the opening and closing of ocean navigation for the Montreal harbor, the length of the season being perhaps a few days shorter. This would be governed by Lake Nipissing and conditions at the summit and the Mattawa reaches, and the indications are that an average of 210 days each year would be available.

The difference in elevation of 659 ft. between Montreal and the summit level, and of 90 ft. between the summit and Georgian Bay, is overcome by 27 locks ranging in lift from 5 to 50 ft. By the Riviere des Prairies route, however, this number is reduced to 26. All locks are designed to be built of concrete. Regarding their size, lake boats have attained a length of over 600 ft., and the minimum dimensions of lock chamber should not be less than 650 ft. by 65 ft. The estimated cost of the locks is based on these dimensions, but in the final report the additional cost of building these locks 800 ft. by 75 ft., should it be found desirable, will be given. In all cases the depth of water on the sills will be 22 ft. at extreme low stage. The navigation scheme requires the building of 45 dams of various sizes, not including those which will be required in connection with the system of storage reservoirs. Generally, where the quantity of water is much above the canal requirements the rock-filled type of dam has been adopted. Where, however, it is important to economize water for lockages concrete dams have been designed. The estimate of cost is based on these two kinds of dams, and the stop log system of regulation sluices has been adopted throughout, with the exception of a few locations, where stony sluices are deemed necessary.

Intimately connected with the navigation scheme is the question of control of flood waters of the Ottawa River. This would be of a great benefit to navigation as well as to industries along the river depending on waterpower. It is intended to effect this by creating large storage reservoirs, so regulated that during the flood season they will retain a portion of the surplus water which will be gradually released during the low water period. This question will be discussed in the report, but cannot be closed, as a complete solution of the problem will require more extended investigations than it has been possible to make so far. The present plans for the construction of the canal entirely alter the general features of the river. For the purpose of lockage the falls are concentrated, and all of the small rapids obliterated. The dams built for navigation purposes, by concentrating the fall at one point, eliminate the greatest difficulty in the development of the water powers. In addition, the needs of navigation require the elimination of extreme high water by the construction of a system of storage reservoirs at the upper reaches of the Ottawa River, and its main tributaries, the water stored to be released at low water period, thus increasing the average flow so that nearly 1,000,000 h.p. can flow for power purposes.

The cost of the canal is estimated at $99,689,000 if the route via Ste. Anne de Bellevue, Lake St. Louis and the St. Lawrence River is followed to Montreal. If, however, the other mouth of the Ottawa River, known as Riviere des Prairies, is followed, the cost is estimated at $93,890,000. In either case $900,000 will have to be spent for a feeder at the summit of the canal, when this is required. The land damages are partly covered by the estimate and partly by contingencies. In most cases of undeveloped water powers it has been assumed that owners could be compensated by being granted power privileges at the nearest dam. The cost of damages cannot, however, be well defined. In 10 years from now it is likely that the damages to pay would be much larger, as conditions on the river would be much more involved. This amount cannot be well foreseen. It might be larger than estimated by from $1,000,000 to $2,000,000, according to conditions at the time of construction and the legal view taken of some of the claims.

The geology of the lower 200 miles of the Ottawa River creates 7 main steps, at each one of which one or more locks are required. The estimated cost of the Montreal reach from the custom house to Verdun is $3,859,000, including the lock costing $1,090,700 opposite the custom house near Mackay pier. The Lake St. Louis reach from Verdun to Ste. Anne's, 19 miles, is estimated at $12,553,000, of which $1,093,000 is set down at Verdun to gain the level of Lake St. Louis. The impounded basin from Point St. Charles westward affords an upper harbor of 5 miles long. The first series of locks and channels are to connect Oka Lake and Montreal harbor Between these surfaces the rise is 55 ft., chiefly due to the plunge made by the St. Lawrence at Lachine Rapids. The Montreal lock is opposite the custom house, near Mackay pier. The Verdun lock, 5 miles further up, gains the surface of Lake St. Louis, through which the line ascends to Ste. Anne's. The Ste. Anne's lock makes the rise to Oka Lake, and the channel leads up to Point Fortune. The western part of Montreal, above Victoria bridge, is protected from high water by the Verdun dyke. This suggests keeping high water surface permanently by an embankment from Point St. Charles to Nuns' Island, and thence up to join the shore at Verdun hospital. The impounded basin would be 22 ft. deep, and afford an upper harbor 5 miles long. The time required to complete this reach depends upon the rate of excavation in Verdun Canal cutting—that is, 5 years—because the embankments are made up of the material excavated.

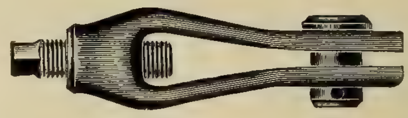
Estimate of Lake St. Louis reach (Verdun to Ste. Anne's, 19 miles)—Verdun lock, $1,093,000; dam and regulation, $12,200; channel, $11,070,000; damages, $677,000; total, $12,553,000.

Above Verdun lock is a full depth cutting for 3 miles across the point to Lachine bank, then an embanked canal along shore for 2 miles up to Lachine. Through the northern portion of Lake St. Louis the channel proceeds to Ste. Anne's. The canal cut is 22 ft. deep, 200 ft. wide at bottom, and 290 ft. at top, with side slopes 2 out so 1 up. The canal excavation consists of 3,000,000 cubic yards of earth, and 2,000,000 of rock, all of which will be used to form the embankments for Montreal basin below the canal side banks above to Lachine. In Lake St. Louis there are 2,000,000 yards of rock and 2,000,000 of earth to be excavated. The north side of the lake is shallow, and the surface fluctuates so that it is not only necessary to dredge the shoals, but to dredge deep enough for 22 ft. at the lowest stage. The time probably necessary to complete this reach would be five years, owing to the heavy excavation. For a mile above Ste. Anne's lock there is a rock dredging to form the channel, and then earth dredging to Cadieux Island. The line then follows a deep portion of the lake to Hay Island, where 1,000,000 cubic yards of soft dredging is necessary. From this up the width narrows to a ½ mile, which continues 8 miles to Point Fortune. The lock at Ste. Anne's is crossed by the C.P.R. and the G.T.R., both double track, on drawspans. The excavation above Ste. Anne's will employ two dredging plants for five seasons, which would correspond to the time required for the work through Lake St. Louis. The Ste. Anne's to Point Fortune reach of 25 miles is estimated to cost $2,334,000.

The estimates for the Back River route (ship channel to Sault au Recollet, 17 miles) are: Prairie lock, $12,000; dams and regulations, $114,100; channel, $4,196,100; damages, $574,600; total, $5,697,800. The Back River line leaves the ship channel near Varennes and passes Bourdon Island at Bout de l'Ile up to Des Prairies village. The width is 300 ft. widened at curves, and 4,000,000 cubic yards of soft dredging is required. Prairies lock is at the head of this channel, 8 miles from the ship channel. It and the dam and sluices are founded on solid rock. Visitation Island, at the head of this reach, obstructs the channel, and nearly 1,000,000 cubic yards of rock must be removed to enlarge the river and allow the natural flow to pass at moderate speed. Sault au Recollet to Point Fortune, 32 miles: Recollet rock, $1,245,900; dams and regulations, $367,900; channel, $3,649,500; damages, $513,300; total, $7,776,600.

Above the lock is a canal 11 miles long, and 200 ft. wide, up to the entrance of Oka Lake. Through the east end of the lake there is 4,500,000 cubic yards of sand dredging. The line from Oka village to Point Fortune corresponds with the Montreal or front route. These two routes compare in cost as follows: Montreal, Ste. Anne to Point Fortune, $18,746,000; ship channel, Back River to Point Fortune, $13,474,400; difference, $5,271,000.

From a common terminal at Point Fortune the time of transit by the Back River will be 8 hours to the ship channel at the foot of Montreal Island, and the time by Ste. Anne's and Lachine to the Custom House at Montreal 7½ hours. There is one lock less by the Back River. The Back River



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Two locks are proposed at Hull to overcome the plunges at Deschenes, Romick's Rapids and Chaudiere Falls. A location in the valley of Brewery Creek in Hull has been chosen, and lock 1 so placed as to suit the necessary railway crossings. The estimated cost from lock 1 to lock 2 in Hull is $3,383,800. Above the lower lock would be a ⅝ mile reach across Brewery Creek between concrete sidewalks, the creek itself being carried under the canal by a pipe culvert. Lock 2 is so placed that Brewery Street and its electric car line could be crossed at the lower end. The Aylmer electric line will be diverted to this bridge, and also the highway traffic of the Aylmer Road. Above lock 2 is 1 mile of canal, which issues into the raised level of the river, maintained by a large rock embankment with sluiceways, above Chaudiere Falls. The rock excavation from the canal furnished more than sufficient material for the dam. At Deschenes Rapids heavy rock excavation is necessary, not only for the boat channel, but to enlarge the river and prevent current. There is ample depth and width up Aylmer Lake for 20 miles to Crown Point, where soft material is to be dredged. Thence for four miles to Chats lock is free channel. The construction would take from three to four years, depending on the rate of work at Hull. The cost of the stretch from Hull to Chats Rapids, 33 miles, is estimated at $5,599,100, which includes $675,700 for lock 2 at Hull. It is estimated that the stretch from Chats Rapids to Chenaux Rapids, 20 miles, would cost $8,745,600, which includes $818,200 for the lock at the Chats.

The plans for the Riviere des Prairies (Back River route) estimate a cost of $5,697,800 for the first 17 miles as far as Sault au Recollet. The Back River line leaves the ship channel near Varennes, and passes Bourdon Island at Baude Bout de l'Ile, up to Des Prairies village. Prairies lock is at the head of this channel. From Sault au Recollet to Port Fortune the cost is estimated at $7,776,600.

A careful analyis of the work to be performed shows that it would take from 3 to 5 years to develop all contracts and place the whole route under active construction. Some of the sections where heavy submarine excavation is encountered would require at least 5 years to complete under the best conditions of labor and equipment. It may be fairly stated, therefore, that a period of 10 years from inception would be necessary to open the waterway to navigation. This would mean an average expenditure of about $10,000,000 a year.

* * *

The revenue of the port of St. John, N.B., for the winter season, from Nov. 22, 1907, to May 2, was $33,895.57, against $21,616.87 for the 1906-07 season. The chief increases related to grain and lumber.

The Norwegian barque Atlantic had a peculiar experience recently, when, owing to a misunderstanding, she anchored near Partridge Island, N.B., having been directed to Carleton, N.B., instead of Carleton, Que.

Capt. Anderson, of the C.P.R. s.s. Assiniboia, was presented, recently, with an oak rocking chair and an address; Chief Engineer Cameron with a leather arm chair, and $10 for division amongst the crew, by the citizens of Owen Sound, Ont.

J. Barron, son of Justice Barron, Stratford, Ont., who recently joined the cruiser Canada, is the first cadet to enter the Canadian service under the new naval cadet system. The course of study to be followed is similar to that of the British navy, and includes seamanship, navigation, gunnery and general discipline.

C.P.R. Steamship Princess Charlotte.

The twin-screw steamship Princess Charlotte, which is being built for the C.P.R. Co., was launched at the Fairfield Shipbuilding and Engineering Co.'s yards, Govan, near Glasgow, Scotland, June 27, being christened by Mrs. R. Marpole, wife of the C.P.R. General Executive Assistant at Vancouver, B.C.

The new vessel, which is intended for coasting service between Vancouver, B.C., and Seattle, Wash., is, generally speaking, on the lines of the Princess Victoria, built at Newcastle-on-Tyne, for the C.P.R. in 1903, but she is larger and contains many improvements, especially in internal arrangements. The Princess Victoria, which is in regular service on the Pacific Coast, is, according to Lloyd's measurements, 300 ft. long, 40 ft. 5 in. wide, and 15 ft. 4 in. deep, while the new vessel is 342 ft. long, 46½ ft. broad, and 26 ft. deep, to shelter deck. The Princess Charlotte will, therefore, be a very important addition to the C.P.R. fleet in Pacific waters, and, apart altogether from the increase in size, she will illustrate the great advance that has been made in shipbuilding practice even within so short a period as the past five years, an advance that is not so apparent in general designs as in the many improvements that are continually being made in matters of detail, all going towards the more efficient and more economical working of vessels and the greater comfort of passengers.

The Princess Charlotte is constructed in seven watertight compartments, while the orlop deck is also watertight, thus adding greatly to the safety of the vessel. She has altogether five decks—the orlop, the main, the shelter, the promenade, and the shade decks. She has accommodation for a large number of first-class passengers, and a smaller number of second-class, all of whom will have cabins containing every possible comfort, and other rooms of the finest and most up-to-date description. The entrance to the passenger accommodation is through watertight doors on the ship's sides on the shelter deck forward. These doors lead to a splendid central hall, panelled in teak, and having a floor laid with terra cotta and white rubber tiles. There is another large central hall aft of the main entrance. This is fitted up with lounge seats, upholstered in crimson plush, and at its after end is the main staircase, which leads to the passenger accommodation and public rooms on the promenade deck. On either side of the forward central hall there are 12 special three-berth rooms, fitted up in a first-class manner, with electric radiators, sofa beds, washstands, etc., and also four rooms fitted as bridal chambers. Of these four, two are panelled in light mahogany, and two in satinwood, with dressing tables, washstands, electric heaters, large brass bedsteads, and private bathrooms. On either side of the shelter deck there is accommodation for 176 first-class passengers in two and three-berth rooms, fitted in the most modern style, with patent folding lavatories, wash basins, sofa seats, etc. At the after end of the shelter deck there is a central hall similar to that at the forward end, and on the promenade deck there are two spacious halls in a large deckhouse, with a well in the centre of each, giving ample light to the halls below. Over the forward well there is a large ornamental dome-topped skylight, with open sashes for ventilation purposes. On either side there is accommodation for 104 first-class passengers in two-berth rooms, furnished in a manner similar to the staterooms on the shelter deck. These rooms, and also a few on the shelter deck aft, have large, rectangular, horizontal, sliding windows, with Venetian blinds, which can be utilized for ventilating the cabins.

Of the public rooms on the vessel the most important is the first-class dining saloon. It is entered from the main deck aft, by a stairway from the central hall on the shelter deck. The saloon extends from side to side of the ship, and is capable of seating 133 persons. It is framed in white enamelled hardwood, relieved with gold mountings, and is finely lit by large patent pivoted sidelights. The floor is laid with oak parquetry, and at the forward end there are two splendid sideboards with mirror backs.

At the forward end of the promenade deck house already mentioned, there is an observation room, which has specially large plate glass windows, from which passengers will have a splendid view of the vessel's surroundings. The room is tastefully designed, the framing being of mahogany, with a flat white ceiling which, combined with the elaborate electric light fittings, give a very fine effect. In this room there are cosy corners, in which many pleasant hours may be spent by passengers; and also writing tables, large comfortable basket chairs, stools, and circular radiators with marble tops. The room is carpeted and upholstered in green, with amber-colored and gold-fringed curtains.

The smoking room, at the after end of the vessel, is framed in light fumed oak, with carved panels and large plate glass windows. The windows, with the circle-topped skylight overhead, provide plenty of light and ventilation. The interior of the room is broken up into several bays, with tables and chairs upholstered in brown hide leather. The floor is laid with rubber tiles, and at the forward end there will, when the vessel is completed, be a well-equipped bar. The ladies' tea room, at the after end of the shelter deck, is neatly finished in light oak, with inlay panels and blue and cream furnishings.

At the extreme forward end of the vessel there is a large smoking and sitting room, and also bar and dining saloon, for second-class passengers, to the number of 48, with a stairway leading to lavatory and sleeping accommodation on the main and orlop decks respectively. At the forward side of the main entrance to the passenger accommodation there are purser's office, barber's shop and baggage room, and forward of the saloon there are galley, pantry, and storerooms, with all the latest facilities, such as electric dish washers, lifts, etc., for catering for a large number of passengers. Far forward there are mail sorting room, petty officers' rooms, second-class lavatories, and the windlass compartment. On the shade deck, which forms a spacious promenade, to which access is obtained by ladderways at the fore and after ends, there is a large deckhouse providing accommodation for captain and officers. The pilot house, from which the vessel will be navigated, is at the forward end of the shade deck, and above it there is the flying bridge, carrying steering standards and electric light projector, and from which also the vessel can be navigated. The orlop deck forward and aft is utilized for crews' quarters and officers' and engineers' mess rooms. At the stern of the vessel is the steering compartment, fitted with patent gear, controlled from the pilot house, the flying bridge, or the shelter deck aft.

On the main deck, amidships and forward, space is provided for carrying cattle or other cargo. To this space access is obtained by large watertight doors in the ship's sides. The accommodation aft is ventilated by electric fans as well as by ordinary means. The vessel, which is fore and aft rigged, has three funnels. These give her a very fast and handsome appearance. She will carry 10 steel lifeboats on the shade deck.

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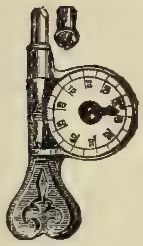
Ticket Punches, Speed Indicators, Lead Car Seals, Sealing Presses, Factory Time and Railroad Checks, Car Pushers, Hat and Coat Badges, Uniform Buttons, etc., etc.



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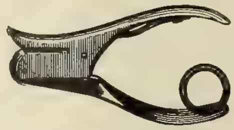

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Where **ILLINOIS CENTRAL RAILROAD COMPANY** has through car service both Coach and Sleeper and Free Chair Cars,

Chicago to Hot Springs, Ark., St. Louis, Nashville, Omaha, St. Paul and Minneapolis, Memphis, Tenn., New Orleans, San Antonio, Texas and all California,

On first and third Tuesdays each month until further notice through tourist sleeping car without change, Chicago to Houston, Texas, leaving 6 p.m., on above Tuesdays. Very low abnormal rates, "Homeseekers," as for instance, Chicago to Houston and return, $25.00; New Orleans the same, good 30 days. Special homeseekers' round trip rates to the South and Southwest.

Tourist rates to Arizona, Mexico, and California, liberal stopover privileges. Rates via New Orleans as low as via any other route.

Look the Illinois Central map over and consult

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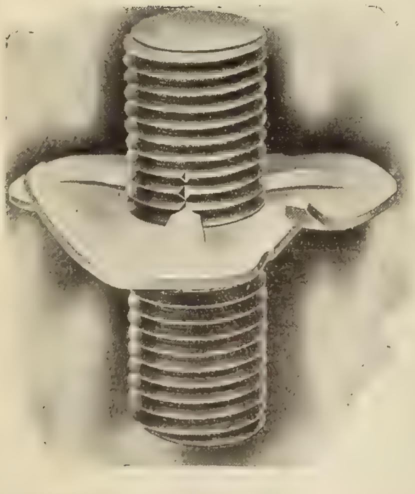

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Is the only absolute and permanent nut-lock on the market. It never loosens. It becomes, when once adjusted, a part of the bolt and nut. It locks invariably till the bolt and nut itself rusts away from the action of the elements. Once on it stays on, stays tight, keeps every part tight. It is mechanical insurance.

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W. H. HENRY, Can. Pass. Agent,
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sets of inverted, direct-acting, triple-expansion engines, each set having four cylinders and four cranks. The engines are balanced, and they have been specially designed so as to reduce the vibration to a minimum when running at a high speed. They are of the open fronted type, the four cylinders of each set being supported—on the side nearest the centre of the ship by four cast iron columns to which the crosshead guides are fixed, and on the outer side by six polished columns of forged steel. The main condensers are separate from the engines. All the pumps, including the air pumps, are independent and steam driven. The steam generating plant consists of six single-ended multitubular boilers of the cylindrical type, designed for a working pressure of 180 lbs. per square inch, and fitted with forced draught and open stokeholds.

Among those present at the launching were R. Marpole, General Executive Assistant C.P.R., Vancouver, and Mrs. Marpole; C. Gardiner Johnson and Mrs. Johnson, Vancouver, and A. Piers, Manager Steamship Lines C.P.R. At the luncheon after the launching Mr. Piers responded to the toast of the C.P.R. Co., saying that instead of working up slowly the speed of their Pacific Coast vessels, they had decided to go in at once for 19 knots. Admiral Sir Digby Morant proposed Mrs. Marpole's health, presenting her, on behalf of the shipbuilding company, with a gold watch bracelet. Mr. Marpole responded.

An order-in-council has been issued rescinding the regulations regarding fisheries bounties established Dec. 10, 1897, under the Bounty Act of 1891, and substituting revised rules and regulations.

During May, 9 men were killed and 8 injured in the course of their employment in Canadian navigation, 4 being killed by boiler explosions, 3 by falls and one each by drowning, and a collision; and 4 being injured by falling material, 2 by explosion, and one each by a fall and by burning.

The Department of Marine has chartered the steamboat Aranmore from Holliday Bros., Quebec, for lighthouse supply service on the St. Lawrence River and Gulf, at $250 a day, and the steamboat Restigouche, from Bouchard Bros., Quebec, for lighthouse supply service on the Atlantic coast of Nova Scotia, at $235 a day. In each case the charter includes wages of crew, engine room supplies, food, coal and all expenses in operation.

Among the Express Companies.

The Canadian Ex. Co. has opened offices at Newport Point, Que.; Parkindale, N.B., and Fountain Road, N.B.

G. W. Steavens has been appointed acting agent, Canadian Northern Ex. Co., at Edmonton, Alta., vice T. Henderson.

G. L. Smith has been appointed Agent, Canadian Northern Ex. Co., at Dauphin, Man., succeeding J. A. Ferguson, resigned.

The Dominion Ex. Co.'s office at Grand

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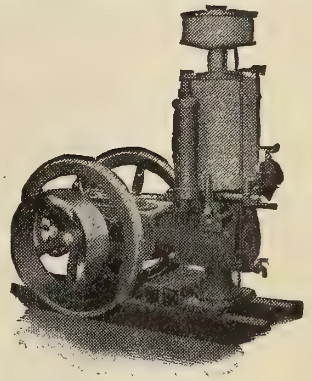
The GOVERNOR is so sensitive that it never wastes fuel

Constructed without any useless frills but made to stand hard work.

Sizes from 1 H.P. to 25 H.P.



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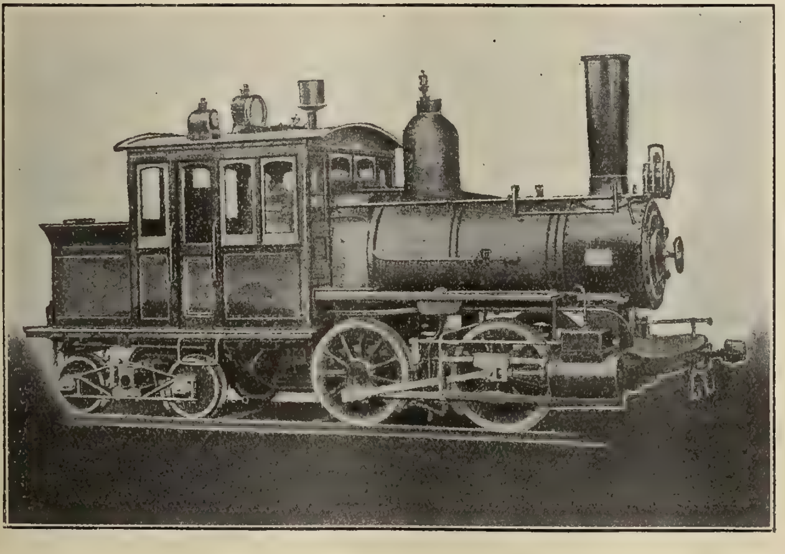
WINNIPEG, MAN. TORONTO. MONTREAL, QUE.



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Two Light Locomotives, as shown opposite, in first-class condition. Recently overhauled. Weight, 24 tons; gauge, 4′ 8½″; cylinders, 11″ x 16″; 38″ drivers; 550 gallons water; 1¼ tons coal.

FOR FURTHER INFORMATION, PRICES, ETC., ENQUIRE OF THE

Montreal Locomotive Works
MONTREAL, P.Q. Limited

Forks, B.C., was destroyed July 10 in a fire there which did total damage estimated at $300,000.

W. S. Stout, President Dominion Ex. Co., Toronto, has been elected President of the Expressmen's Mutual Benefit Association for the current year.

The Dominion Ex. Co. has opened offices at Beleek, Bourkes, Byng Inlet, Chamberlain, Dane, Kenogami, Krugersdorf, Matheson, Ramora, Sesikinika and Swastika Ont.

The loss occasioned the Dominion Ex. Co., and the Canadian Ex. Co., at the recent fire, which did nearly $2,000,000 damage at Three Rivers, Que., is placed at $10,000 each.

The Dominion Ex. Co. is asking the Ontario courts to declare that a business tax on an assessment of $1,700 in Chatham, Ont., is illegal, and for an injunction restraining the city from collecting taxes for 1907 and 1908 on the assessment. The company contends that as it merely rents part of the building in Chatham it is not liable for a business tax.

The Dominion Ex. Co. having put its service in operation on the C.P.R. route between Toronto and Sudbury, Ont., has reduced its rates from Toronto and 136 other points in Ontario to all points west of Sudbury. The reduction in rates is made owing to the reduction in mileage between these points consequent upon the opening of the new line.

Telegraph and Cable Matters.

The C.P.R. telegraph office at Grand Forks, B.C., was destroyed by fire July 10.

J. D. Oppe, General Manager of the Marconi Wireless Telegraph Co. of Canada, has resigned.

The G.N.W. Telegraph Co.'s office at Three Rivers, Que., was burnt out at the recent fire there, the damage being estimated at $8,000.

The House of Commons passed the Government bill, to bring the telegraph and telephone companies under the control of the Board of Railway Commissioners, July 2.

J. Kent, Manager, and W. J. Camp, Electrical Engineer, C.P.R. Telegraphs, accompanied by Mrs. and Miss Kent and Miss Camp, left Montreal, July 3, for the Pacific coast.

The British Columbia District Telegraph and Delivery Co., Ltd., has been re-incorporated under the B.C. Companies Act, with a capital of $25,000, to deliver parcels, etc., and to perform all the duties appertaining to what is known as the District Telegraph System, in any town or city in British Columbia.

J. Henniker Heaton, M.P., the British postal reformer, speaking at a dinner of the American Society in London, Eng., July 4, said: "We will shortly have a penny-a-word cablegram; I am confident that with the assistance of the great electricians whom we have interested in the matter, it will soon be successfully accomplished."

The Dominion Parliament has voted the following sums in addition to those previously voted on account of the Government telegraph lines:

Repoling lines in Cape Breton, N.S.......	$187.50
Improving repair service, Quebec lines.....	500.00
Extension St. Charles to Peribonka, Que...	125.00
Extension to Pender and Mayne Islands, B.C.	50.00
Improvements Victoria-Cape Beale line, B.C.	750.00
Vernon-Kelowna-Penticton line, B.C.......	437.50
Vernon-Lumley line, B.C..................	212.50
New poles, Ashcroft-Quesnel line........	250.00

A bill was introduced into the House of Commons, July 8, providing for the payment to the Canadian Associated Press of sums as follows: For period, July 1, 1908, to Mar. 31, 1909, $9,000; for period April 1, 1909, to Mar. 31, 1910, $12,000; for period April 1, 1910, to June 30, 1910, $3,000. These sums to be paid at such times and in such manner as the Finance Minister determines, to assist in

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One second-hand, 100 ft., singletrack, deckplate girder span (C.P.Ry. specifications), in good condition. Weight approximately 80 tons. Can be used for either Railway or Roadway purposes.
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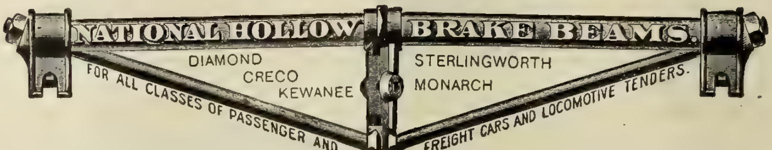
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FOR ALL CLASSES OF PASSENGER AND FREIGHT CARS AND LOCOMOTIVE TENDERS.
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JAMES PLAYFAIR, Pres. & Gen'l Mgr. D. L. WHITE, Vice-President. J. W. BENSON, Sec'y-Treas.
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First-Class Tugs for Wrecking, Raft Towing, etc. Steam Pumps, Divers, Jacks, Hawsers and Lighters

maintaining an efficient service of telegraphic news from Great Britain for publication in the Canadian press.

The Wire and Cable Co., Ltd., has been licensed under the act respecting extra-provincial companies, to carry out one or any of the company's objects in British Columbia, with H. H. Abbott, Vancouver, as its attorney. The objects of the company include the manufacture and dealing in telegraph and telephone wire and appliances; to purchase, or lease, and operate telegraph and telephone lines, and to purchase shares or amalgamate with any similar company.

The annual meeting of the Dominion Telegraph Co. was held at Toronto July 8. The directors' report mentioned the regular payment quarterly, for the past 21 years, of he guaranteed interest of 6% on the capital stock of the company, by the Western Union Telegraph Co., lessees of the company's property. The lease is for 99 years from July 1, 1879. The assets show a total of $1,310,247.87 and liabilities, including $14,000 dividend payable July 15, $1,015,739.08, leaving a balance of $294,508.79, which has been taken to profit and loss account. The officers and directors for the current year are: President, T. Swinyard; Vice-President, Sir Henry M. Pellatt; other directors: A. G. Ramsay, T. F. Clark, C. O'Reilly, R. C. Clowry, B. Brooks, Æ. Jarvis; Secretary-Treasurer, F. Roper.

Railway Telegraph Superintendents.

The 27th annual convention of the Association of Railway Telegraph Superintendents was held at Montreal June 24 to 26. After addresses of welcome by Ald. Sadler, representing the Mayor, and by the Vice-President of the Business Men's League, the usual routine business, such as reading the minutes and receiving the Secretary-Treasurer's report, was transacted. This was followed by a paper, read by W. W. Ryder, Superintendent of Telegraphs, Chicago, Burlington and Quincy Rd., on Train Dispatching by Telephone. Other papers read during the session were: Commercial Reports, by J. P. Church, Wabash Rd. Telegraphs, Decatur, Ill.; Reduction of Telegraphing by use of printed forms, by O. C. Greene, Superintendent Northern Pacific Ry. Telegraphs, read by J. L. Davis, Chicago, Ill.; Dry Batteries and Telegraph Circuits, by U. J. Fry, Superintendent Chicago, Milwaukee and St. Paul Rd. Telegraphs, Milwaukee, Wis.; Adverse Railroad Legislation, by E. A. Chenery, Superintendent Missouri Pacific System Telegraphs; Past, Present and Future of the Association, by W. F. Williams, Seaboard Air Line Ry. Telegraphs; Qualifying Operators for Train Dispatching, by C. S. Rhoads, Superintendent Big Four Telegraphs; Wiring of Station Buildings, from a contractor's standpoint, by J. H. Jacoby; Wireless Telegraphy, by W. Maver, Jr., New York.

It was decided to hold the next convention at Detroit, Mich., June 23, 24 and 25, 1909. The following officers were elected for the current year: President, W. J. Camp, Electrical Engineer C.P.R. Telegraphs, Montreal; Vice-President, G. W. Dailey, Superintendent Chicago and Northwestern Ry. Telegraphs, Chicago, Ill.; Secretary-Treasurer, P. W. Drew, Superintendent Wisconsin Central Ry. Telegraphs, Chicago, Ill.

On the afternoon of the first day the members of the association, as guests of the G.T.R., went by train to Lachine, and thence by steamboat back to Montreal via the rapids. On the second day the majority travelled to Quebec in sleeping cars, kindly provided by the C.P.R., where the party, at the invitation of E. A. Evans, General Manager Quebec Ry., Light and Power Co., proceeded to Montmorency Falls, and Ste. Anne de Beaupré, in special cars. The members of the Association spoke very highly of the courtesy and attention displayed by W. J. and Mrs. Camp, the latter, as chairman of the ladies' reception committee, being presented by the lady visitors with a silver card receiver, suitably engraved, as a mark of their appreciation of her efforts to make their visit enjoyable.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Aerated Waters
E. L. Drewry..........................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co....................Toronto.
Canadian Westinghouse Co......Hamilton, Ont.

Ales
E. L. Drewry..........................Winnipeg.

Alloys
Goldschmidt Thermit Co...............Toronto.

Angle Bars
Hamilton Steel & Iron Co.......Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co.......Racine, Wis.

Automobiles
Polson Iron Works, Ltd...............Toronto.

Axes
James Smart Mfg. Co..........Brockville, Ont.

Axe Steel
Montreal Steel Works.................Montreal.

Axles
James Hutton & Co...................Montreal.
Jas. W. Pyke & Co...................Montreal.
Rhodes, Curry & Co.............Amherst, N.S.

Badges
R. Woodman Mfg. & Supply Co...Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co...Boston, Mass.

Beacons
International Marine Signal Co........Ottawa.

Bearings, Side
Chicago Railway Equipment Co......Chicago, Ill.

Blankets and Bedding
The Hudson's Bay Co.........................

Blasting Powder
Standard Explosives Limited..........Montreal.

Boilers
Babcock & Wilcox (Ltd.)..............Montreal.
Canada Foundry Co....................Toronto.
Jno.McDougall,Caledonian IronWorks Co.Montreal
Polson Iron Works....................Toronto.

Boilers, Portable
Canada Foundry Co....................Toronto.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.)..............Montreal.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.)..............Montreal.

Boilers, Water Tube
Babcock & Wilcox (Ltd.)..............Montreal.
Jno.McDougall,Caledonian IronWorks Co.Montreal

Boilers, Tubes
Jas. W. Pyke & Co...................Montreal.

Bolsters
Dominion Car and Foundry Co.........Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited.....................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co.........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.........Montreal.
N. J. Holden Co., Ltd.................Montreal.
Railway Materials Co..........New York City.

Brass and Copper Cloth
The B. Greening Co.............Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited.................Toronto.

Bridges
Canada Foundry Co....................Toronto.
Canadian Bridge Co..........Walkerville, Ont.
Dominion Bridge Co...................Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd..........Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.

Bumping Posts
McCord & Co........................Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co..New York.

Buoys
International Marine Signal Co........Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co...............Montreal.

Caboose Heaters
Geo. R. Prowse......................Montreal.

Car Castings
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Car Closets
Duner Co...........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd.................Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co..New York.
Canadian Gold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Jacks
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.

Car Kitchen Equipments
Geo. R. Prowse......................Montreal.

Car Lighting
Bliss Electric Car Lighting Co...Milwaukee, Wis.
Canadian Cold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York

Car Movers
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
R. Woodman Mfg. & Supply Co...Boston, Mass.

Car Ranges
Geo. R. Prowse......................Montreal.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd.................Montreal.
F. H. Hopkins & Co..................Montreal.

Car Seals
R. Woodman Mfg. & Supply Co....Boston, Mass.

Car Wash Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Cars
American Car and Equipment Co....Chicago, Ill.
Canada Car Co. (Ltd.)................Montreal.
Crossen Car Mfg. Co.............Cobourg, Ont.
Dominion Car and Foundry Co.........Montreal.
J. T. Gardner......................Chicago, Ill.
Hart-Otis Car Co. (Ltd.)..............Montreal.
Hotchkiss, Blue & Co..............Chicago, Ill.
Kilgore-Peteler Co...........Minneapolis, Minn.
King-Lawson Car Co................New York.
Preston Car and Coach Co., Ltd...Preston, Ont.
Rhodes, Curry & Co.............Amherst, N.S.

Cars, Coal
Kilgore-Peteler Co...........Minneapolis, Minn.

Cars, Mine
Canadian Fairbanks Co., Ltd..........Montreal.
Kilgore-Peteler Co...........Minneapolis, Minn.

Car Windows
O. M. Edwards...................Syracuse, N.Y.

Castings
Crossen Car Mfg. Co.............Cobourg, Ont.
Standard Steel Works Co......Philadelphia, Pa.

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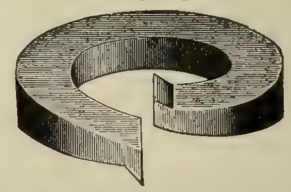

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Canadian Iron and Foundry Co. .... Montreal.
Kerr Engine Co. .... Walkerville, Ont.
St. Thomas Brass Co. .... St. Thomas, Ont.

Castings, Iron
Canada Car Co., Ltd. .... Montreal.
Canadian Iron and Foundry Co. .... Montreal.
Kerr Engine Co. .... Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co—Mahwah, N.J.

Castings, Malleable
Taylor & Arnold .... Montreal.

Castings, Steel
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Jas. W. Pyke & Co. .... Montreal.

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Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Clevis Nuts
Cleveland City Forge & Iron Co. ... Cleveland, O.

Coal Haulage Ropes
The B. Greening Co. .... Hamilton, Ont.

Concrete Mixers and Rock Crushers
Canadian Fairbanks Co., Ltd. .... Montreal.
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.
Toronto Pressed Steel Co. .... Toronto.

Contractors' Plant
American Car and Equipment Co. ... Chicago, Ill.
American Hoist and Derrick Co. .. St. Paul, Minn.
M. Beatty & Sons .... Welland, Ont.
Canadian Fairbanks Co., Ltd. .... Montreal.
J. T. Gardner .... Chicago, Ill.
F. H. Hopkins & Co. .... Montreal.
The W. H. Kelson Co. .... Montreal.
Kilgore-Peteler Co. .... Minneapolis, Minn.
Mussens Limited .... Montreal.
Toronto Pressed Steel Co. .... Toronto.

Contractors' Supplies
F. H. Hopkins & Co. .... Montreal.
Rice Lewis & Son .... Toronto.
Toronto Pressed Steel Co. .... Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.) .... Montreal.

Cooking Apparatus
Geo. R. Prowse .... Montreal.

Copperware
Geo. R. Prowse .... Montreal.

Copying Presses
James Smart Mfg. Co. .... Brockville, Ont.

Corrugated Furnaces
Continental Iron Works .... Brooklyn, N.Y.

Counter Dusters
Wolfe Brush Co. .... Pitttburg, Pa.

Couplers, Car and Locomotive
Acme Railway Equipment Co. .Philadelphia, Pa.
Dominion Car and Foundry Co. .... Montreal.
Latrobe Steel & Coupler Co. ... Philadelphia, Pa.
McConway & Torley Co. .... Pittsburg, Pa.
National Malleable Castings Co. .Cleveland, Ohio.
Taylor & Arnold .... Montreal.
Washburn Steel Castings & Coupler Co., ... Minneapolis, Minn.

Cranes, Locomotive
American Hoist and Derrick Co. ... St. Paul, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co. .... Toronto.

Cross Arm Braces
Canadian General Electric Co. .... Toronto.
Toronto Bolt and Forging Co. .... Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co. ... Toronto.

Crowbars
B. J. Coghlin & Co. .... Montreal.
Toronto Bolt and Forging Co. .... Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co. .Hamilton.

Cuts
Acton Burrows Limited .... Toronto.

Derrick Ropes
Dominion Wire Rope Co. .... Montreal.
The B. Greening Co. .... Hamilton, Ont.

Derricks
American Hoist and Derrick Co. ... St. Paul, Minn.
M. Beatty & Sons .... Welland, Ont.
Miller Bros. & Toms .... Montreal.
Mussens Limited .... Montreal.

Dies
Butterfield & Co. .... Rock Island, Que.

Diving Outfits
John Date .... Montreal.
Mussens Limited .... Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards .... Syracuse, N.Y.

Door Signs
Acton Burrows Limited .... Toronto.

Draft Gear
Cardwell Mfg. Co. .... Chicago, Ill.
Farlow Draft Gear Co. .... Baltimore, Md.
McCord & Co. .... Chicago, Ill.
Standard Coupler Co. .... New York City.

Drawing Materials
James Foster .... Toronto.

Dredges
M. Beatty & Sons .... Welland, Ont.

Drills
W. Abbott .... Montreal.

Dry Goods
The Hudson's Bay Co. ....

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Canadian Fairbanks Co., Ltd. .... Montreal.
F. H. Hopkins & Co. .... Montreal.
Kilgore-Peteler Co. .... Minneapolis, Minn.
King-Lawson Car Co. .... New York.
Toronto Pressed Steel Co. .... Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co. . Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.) .... Montreal.

Electric Car Route Signs
Acton Burrows Limited .... Toronto.

Electric Cranes
Babcock & Wilcox .... Montreal.
Canada Foundry Co. .... Toronto.
Canadian Fairbanks Co., Ltd. .... Montreal.
Dominion Bridge Co. .... Montreal.
Mussens Limited .... Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co. .Mahwah, N.J.

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Standard Explosives Limited .... Montreal.

Enameled Iron Signs
Acton Burrows Limited .... Toronto.

Engineers' Supplies
Canadian Fairbanks Co. .... Montreal.

Engines, Gasoline
Canadian Fairbanks Co. .... Montreal.
Ontario Wind Engine and Pump Co. .... Toronto.

Engines, Hoisting
American Hoist and Derrick Co. .. St. Paul, Minn.
M. Beatty & Sons .... Welland, Ont.
Canadian Fairbanks Co., Ltd. .... Montreal.

Engines, Stationary and Marine
Polson Iron Works .... Toronto.

Explosives
Standard Explosives Limited .... Montreal.

Express Office Signs
Acton Burrows Limited .... Toronto.

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Canada Foundry Co. .... Toronto.
McGregor Banwell Fence Co. ... Walkerville, Ont.
Owen Sound Wire Fence Co. .Owen Sound, Ont.

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Mussens Limited .... Montreal.

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The Hudson's Bay Co. ....

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The Hudson's Bay Co. ....

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International Marine Signal Co. .... Ottawa.

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Cleveland City Forge & Iron Co. ... Cleveland, O.
Crossen Car Mfg. Co. .... Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.
Standard Steel Works Co. ... Philadelphia, Pa.

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Fuse Detonators
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McCord & Co. .... Chicago, Ill.

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Gartshore-Thompson Pipe & F'dry Co. .Hamilton.

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McGregor Banwell Fence Co. ... Walkerville, Ont.
Owen Sound Wire Fence Co. .Owen Sound, Ont.

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Wolfe Brush Co. .... Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co. .... Chicago, Ill.

Groceries
The Hudson's Bay Company ....

Hammers
James Smart Mfg. Co. .... Brockville, Ont.

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Canadian Fairbanks Co., Ltd. .... Montreal.
Crossen Car Mfg. Co. .... Cobourg, Ont.
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.
Rice Lewis & Son .... Toronto.
Toronto Pressed Steel Co. .... Toronto.

Hardware
The Hudson's Bay Co. ....
Rice Lewis & Son .... Toronto.

Headlights
The N. L. Piper Railway Supply Co. ... Toronto.
Pyle National Electric Headlight Co. .Chicago, Ill.

Headlinings
Crossen Car Mfg. Co. .... Cobourg, Ont.

Hoisting Machinery
American Hoist and Derrick Co. .St. Paul, Minn.
Brown Hoisting Machinery Co. .Cleveland, Ohio.
Canadian Fairbanks Co., Ltd. .... Montreal.

Hoists, Electric
American Hoist and Derrick Co. ... St. Paul, Minn.

Hoists (Pneumatic)
Taylor & Arnold .... Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio.

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Duner Co. .... Chicago, Ill.

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Kerr Engine Co. .... Walkerville, Ont.

Illustrations
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James Foster .... Toronto.

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Montreal Steel Works .... Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.

Iron, Pig
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.

Iron Signs
Acton Burrows Limited .... Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Jacks
James Smart Mfg. Co. .... Brockville, Ont.

Japans
McCaskill, Dougall & Co. .... Montreal.

Journal Bearings
Canadian Bronze Co. .... Montreal.
Crossen Car Mfg. Co. .... Cobourg, Ont.
Kerr Engine Co. .... Walkerville, Ont.
Jas. W. Pyke & Co. .... Montreal.
St. Thomas Brass Co. .... St. Thomas, Ont.

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McCord & Co. .... Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co. .... Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry .... Winnipeg.

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Canadian Westinghouse Co. ..... Hamilton, Ont.

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The Hudson's Bay Company ....
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The N. L. Piper Railway Supply Co. ... Toronto.

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Polson Iron Works .... Toronto.

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Canadian Fairbanks Co., Ltd. .... Montreal.
F. H. Hopkins & Co. .... Montreal.
Mussens Limited .... Montreal.

Locomotive Cranes
American Hoist and Derrick Co. .. St. Paul, Minn.

Locomotive Driver Brake Shoe
American Brake & Shoe F'dry Co. .Mahwah, N.J.
Canadian Iron and Foundry Co. .... Montreal.

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Taylor & Arnold .... Montreal.

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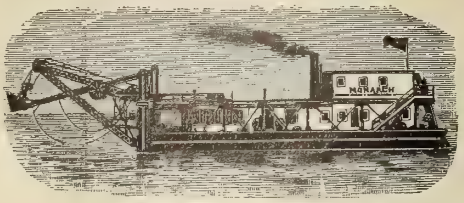

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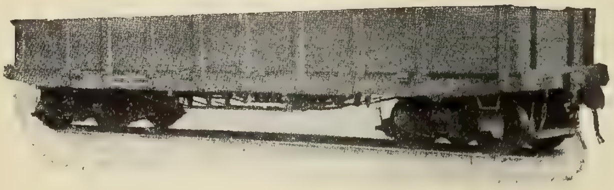

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Montreal Locomotive Works (Ltd.)......Montreal.

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Canada Foundry Co......Toronto.
Canadian Fairbanks Co., Ltd......Montreal.
Canadian Locomotive Co......Kingston, Ont.
J. T. Gardner......Chicago, Ill.
Hotchkiss, Blue & Co......Chicago, Ill.
The W. H. Kelson Co......Montreal.
Lima Locomotive Co......Lima, O.
Montreal Locomotive Works (Ltd.)......Montreal.
H. K. Porter Co......Pittsburg, Pa.
Vulcan Iron Works......Wilkesbarre, Pa.

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Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.
Flannery Bolt Co......Pittsburg, Pa.

Lubricators
McCord & Co......Chicago, Ill.
Taylor & Arnold......Montreal.

Machine Tools
W. Abbott......Montreal.
Canadian Fairbanks Co......Montreal.

Machinery, Power
Jno. McDougall, Caledonian Iron Works Co. Montreal

Machinery Special
Miller Bros. & Toms......Montreal.

Machinery, Transmission
Canadian Fairbanks Co., Ltd......Montreal.
Miller Bros. & Toms......Montreal.

Manganese Steel Castings
Montreal Steel Works......Montreal.

Manhole Frames and Covers
American Brake Shoe & F'dry Co...Mahwah, N.J.
Canadian Iron and Foundry Co......Montreal.

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Goldschmidt Thermit Co......Toronto.

Marine Supplies
Rice Lewis & Son......Toronto.

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Lufkin Rule Co......Saginaw, Mich.

Metals
Goldschmidt Thermit Co......Toronto.

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Acton Burrows Limited......Toronto.

Milling Cutters
W. Abbott......Montreal.

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McCord & Co......Chicago, Ill.

Nickel
The Orford Copper Co......New York.

Nickel for Nickel Steel
The Orford Copper Co......New York.

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Acton Burrows Limited......Toronto.

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Dunning & Eckenstein......Montreal.
Positive Lock Washer Co......Newark, N.J.

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Canada Foundry Co......Toronto.
Toronto Bolt and Forging Co......Toronto.

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The Hudson's Bay Company......

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Canadian Office & School Furniture Co. Preston, Ont.

Office Signs
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Railway Materials Co......New York City.

Oil Tanks
S. F. Bowser & Co., Limited......Toronto.

Oils
Canadian Oil Co......Toronto.
Galena Signal Oil Co..Franklin, Pa., and Toronto.

Packing
Canadian Fairbanks Co., Ltd......Montreal.
The N. L. Piper Railway Supply Co......Toronto.

Paint Brushes
Wolfe Brush Co......Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co......Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co......Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co......Pittsburg, Pa.

Paints
Canadian Oil Co......Toronto.

Pinch Bars
The N. L. Piper Railway Supply Co......Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co..New York.

Pipe Stocks
Butterfield & Co......Rock Island, Que.

Platforms, Steel
Standard Coupler Co......New York City.

Ploughs, Contractors'
Mussens Limited......Montreal.
Toronto Pressed Steel Co......Toronto.

Pneumatic Tools
N. J. Holden Co., Ltd......Montreal.

Porter
E. L. Drewry......Winnipeg.

Portable Boilers
Babcock & Wilcox (Ltd.)......Montreal.

Printing
The Hunter-Rose Co......Toronto.
The Mail Job Printing Company......Toronto.

Pumps
S. F. Bowser & Co., Limited......Toronto.
Canadian Fairbanks Co......Montreal.
Canada Foundry Co......Toronto.
Ontario Wind Engine and Pump Co....Toronto.
James Smart Mfg. Co......Brockville, Ont.

Pumps (Centrifugal)
M. Beatty & Sons......Welland, Ont.

Rail Benders, Roller
F. H. Hopkins & Co......Montreal.
Montreal Steel Works......Montreal.

Rails (new)
Dominion Iron & Steel Co......Sydney, N.S.
Drummond, McCall & Co......Montreal.
J. T. Gardner......Chicago, Ill.
J. J. Gartshore......Toronto.
F. H. Hopkins & Co......Montreal.
Kilgore-Peteler Co......Minneapolis, Minn.

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F. H. Hopkins & Co......Montreal.
J. J. Gartshore......Toronto.
Mussens Limited......Montreal.
Jas. W. Pyke & Co......Montreal.

Rail Joints
The Rail Joint Co. of Canada......Montreal.

Railway Pile Drivers
F. H. Hopkins & Co......Montreal.
Mussens Limited......Montreal.

Railway Supplies
Canadian Fairbanks Co......Montreal.
The W. H. Kelson Co......Montreal.
The Hiram L. Piper Co......Montreal.
The N. L. Piper Railway Supply Co....Toronto.
Rice Lewis & Son......Toronto.

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Butterfield & Co......Rock Island, Que.

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Geo. R. Prowse......Montreal.

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Standard Steel Works Co......Philadelphia, Pa.

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Canadian Bridge Co......Walkerville, Ont.
Dominion Bridge Co......Montreal.

Rope
F. H. Hopkins & Co......Montreal.
The Hudson's Bay Co......

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Crossen Car Mfg. Co......Cobourg, Ont.

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O. M. Edwards......Syracuse, N.Y.

Sash Locks
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Saw Steel
Montreal Steel Works......Montreal.

Scoria Blocks
W. H. Knowlton......Toronto.

Scrapers (Wheel and Drag)
Bechtels Limited......Waterloo, Ont.
F. H. Hopkins & Co......Montreal.
Mussens Limited......Montreal.
Toronto Pressed Steel Co......Toronto.

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Butterfield & Co......Rock Island, Que.

Screws, Coach and Lag
Toronto Bolt and Forging Co......Toronto.

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Acton Burrows Limited......Toronto.

Semaphores
The N. L. Piper Railway Supply Co....Toronto.

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Shafting, Hollow
Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.

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Polson Iron Works......Toronto.

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Railways Materials Co......New York.

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Dominion Car and Foundry Co......Montreal.

Signal House Numbers
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Signals
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N. L. Piper Railway Supply Co......Toronto.

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Chicago Railway Equipment Co......Chicago, Ill.

Sledges
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Snow Ploughs
Crossen Car Mfg. Co......Cobourg, Ont.
Rhodes, Curry & Co......Amherst, N.S.

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Toronto Bolt and Forging Co......Toronto.

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McCord & Co......Chicago, Ill.

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B. J. Coghlin......Montreal.
F. H. Hopkins & Co......Montreal.
Montreal Steel Works......Montreal.
Standard Steel Works Co......Philadelphia, Pa.

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Flannery Bolt Co......Pittsburg, Pa

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Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.

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Taylor & Arnold......Montreal.

Staybolt Taps
Butterfield & Co......Rock Island, Que.

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Safety Car Heating and Lighting Co...New York.

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Canadian Fairbanks Co., Ltd......Montreal.
F. H. Hopkins & Co......Montreal.
Hotchkiss, Blue & Co......Chicago, Ill.
Mussens Limited......Montreal.

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The W. H. Kelson Co......Montreal.

Steamships
Polson Iron Works......Toronto.

Steamship Signs
Acton Burrows Limited......Toronto.

Steel
W. Abbott......Montreal.
Wm. Jessop & Sons......Sheffield, Eng.

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Canada Foundry Co......Toronto.
Canadian Bridge Co......Walkerville, Ont.
Dominion Bridge Co......Montreal.

Steel, Fire Box
Taylor & Arnold......Montreal.

Steel for Springs
James Hutton & Co......Montreal.

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Mussens Limited. . . . . Montreal.

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The B. Greening Co. . . . . Hamilton, Ont.
F. H. Hopkins & Co. . . . . Montreal.

Switch Stands
Hayes Track Appliance Co. . . . . Geneva, N. Y.

Switch Targets
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Canada Foundry Co. . . . . Toronto.
Jno. McDougall, Caledonian Iron Works Co. Montreal
Ontario Wind Engine and Pump Co. . . . . Toronto.

Taps
Butterfield & Co. . . . . Rock Island, Que.

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Acton Burrows Limited. . . . . Toronto.

Thermit
Goldschmidt Thermit Co. . . . . Toronto.

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Canadian Office and School Furniture Co. . Preston.

Ticket Punches
R. Woodman Mfg. and Supply Co. . Boston, Mass.

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Timber
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James Smart Mfg. Co. . . . . Brockville, Ont.

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Canadian Fairbanks Co. . . . . Montreal.
F. H. Hopkins & Co. . . . . Montreal.
Montreal Steel Works. . . . . Montreal.
Mussens Limited. . . . . Montreal.
A. O. Norton. . . . . Coaticook, Que.

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Crossen Car Mfg. Co. . . . . Cobourg, Ont.
F. H. Hopkins & Co. . . . . Montreal.

Tracklaying Machinery
F. H. Hopkins & Co. . . . . Montreal.

Track Tools
Canadian Fairbanks Co., Ltd. . . . . Montreal.
B. J. Coghlin & Co. . . . . Montreal.
F. H. Hopkins & Co. . . . . Montreal.
Montreal Steel Works. . . . . Montreal.
Mussens Limited. . . . . Montreal.

Tramway Equipment
J. J. Gartshore. . . . . Toronto.

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O. M. Edwards. . . . . Syracuse, N.Y.

Trucks
James Smart Mfg. Co. . . . . Brockville, Ont.

Trucks (Electric Car)
Burnham, Williams & Co. . . . . . . Philadelphia, Pa.
Montreal Steel Works. . . . . Montreal.

Trucks (Railroad and Warehouse)
Toronto Pressed Steel Co. . . . . Toronto.

Turnbuckles
Cleveland City Forge and Iron Co. . Cleveland, O.
Montreal Steel Works. . . . . Montreal.

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Canada Foundry Co. . . . . Toronto.
Canadian Bridge Co. . . . . Walkerville, Ont.
Dominion Bridge Co. . . . . Montreal.

Turntable Motors
Taylor & Arnold. . . . . Montreal.

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R. Woodman Mfg. and Supply Co. . Boston, Mass.

Valves, Brass Gate
Kerr Engine Co. . . . . Walkerville, Ont.

Valves, Brass Globe
Kerr Engine Co. . . . . Walkerville, Ont.

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Kilgore-Peteler Co. . . . . Minneapolis, Minn.
Jas. W. Pyke & Co. . . . . Montreal.
Rhodes, Curry & Co. . . . . Amherst, N.S.
Standard Steel Works Co. . . . . . . Philadelphia, Pa.

Wheels, Locomotive
Canadian Iron and Foundry Co. . . . . Montreal.

Wheels, rolled, solid forged
Standard Steel Works Co. . . . . . . Philadelphia, Pa.

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Standard Steel Works Co. . . . . . . Philadelphia, Pa.

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Mussens Limited. . . . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire Cloth
The B. Greening Co. . . . . Hamilton, Ont.

Wire, Copper
E. F. Phillips Electrical Works, Ltd. . . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire, Electric
Canadian General Electric Co. . . . . Toronto.
E. F. Phillips Electrical Works, Ltd. . . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire, Insulated Copper
Canadian General Electric Co. . . . . Toronto.
E. F. Phillips Electrical Works, Ltd. . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire Rope Clips
American Hoist and Derrick Co. . . . St. Paul, Minn.

Wire, Telegraph and Telephone
E. F. Phillips Electrical Works, Ltd. . . . Montreal.
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See Purchasing Agents' Guide on page 683

See Alphabetical Index to Advertisements on page 651.

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RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alaska Central Ry.—A report from J. B. Cameron, Engineer of Construction, upon the line has been issued by the Receivers. Mr. Cameron says: "The road is completed and in operation from Seward, Alaska, its terminus on the Pacific Ocean, to mile 53. The line is well constructed, with 14-ft. roadbed, well drained, 2,800 ties to the mile, and with 60-lb. rail on the first 18 miles and 65-lb. on the remainder. The first 53 miles of road crosses two mountain ranges, and in consequence the heaviest construction of the whole line has been encountered on the road now constructed. The road is constructed with a maximum of 1% compensated grade, except over the two mountain ranges, which have a maximum of 2.2% compensated, which is light for mountain grade. The construction from mile 48 to mile 54 was especially heavy. To maintain here the 2.2% grade, loops were necessary, and exceptionally heavy rock work, bridging and tunnelling was encountered. Seven tunnels have been driven, varying from 200 to 900 ft. in length. From mile 53 to mile 67 the grade and pile bridges are completed and ready for tracklaying, and nearly all the material is on hand to complete this section. From mile 67 to mile 75 the grading is about 75% completed. From mile 75 to mile 105 the right-of-way is cleared and some of the grading has been finished—mostly beyond mile 90. The main line has been definitely located and surveyed to mile 225, and the Matanuska coal branch starting from Knik, at mile 149 on the main line, a distance of 38 miles. Preliminary surveys have been made to the Tanana River, about mile 420. At Seward a substantial wharf has been constructed, with approaches, at a cost of over $75,000; also a large general office building, costing about $60,000. The company has also three large, well-constructed warehouses. The company owns valuable terminals at Seward, and, by special action of Congress, has been granted 320 acres on the north end of Resurrection Bay, east of Seward, and two strips of land along the shore immediately adjoining Seward on the east. All of the south frontage between tidewater has been deeded in fee simple to the railway. This gives us practically a mile of water frontage." This is a railway company in which Toronto men are largely interested, the late Sovereign Bank holding its bonds as security for advances in aid of construction. (Aug., pg. 547.)

Alberta and British Columbia Ry.—During the course of the discussion on the Railway Subsidy Act in the House of Commons, it was stated that in the event of the Southern Central Pacific Ry. failing to make progress with the line from Cowley, Alta., to the International boundary, it would be available for this company. (Aug., pg. 547.) See also Southern Central Pacific Ry.

Algoma Central and Hudson's Bay Ry.—The Dominion Parliament last session provided for the payment of a grant in aid of the construction of an extension of the company's railway, from its projected point of junction with the C.P.R. transcontinental line northward towards the National Transcontinental Ry., for a distance not exceeding 50 miles.

W. H. GRANT,
Manager of Construction, Mackenzie, Mann & Co.'s Eastern Lines.

The question of the completion of the A.C. and H.B. Ry. from its present terminal to a junction with its Michipicoten line, and thence to a junction with the C.P.R. transcontinental line, is before the directors of the Lake Superior Corporation, which controls the railway, and the industries generally spoken of as the Soo companies. (Aug., pg. 547, and June, pg. 401.) See also Manitoulin and North Shore Ry.

Atlantic, Quebec and Western Ry.—The Railway Subsidies Act passed at the recent session of the Dominion Parliament provides for the payment by the Government of the sum of $250,000 towards the construction and completion of 26 bridges on the line of railway between Paspebiac and Gaspe, the subsidy to be payable upon completion of the line. It was stated in the course of the discussion that four of the bridges, viz., those over the St. John River, the Grand River, the Pabos River and the Little River, were large structures, and that the Quebec Government had decided to grant subsidies towards their construction, provided they were made suitable for ordinary highway traffic, as well as for the railway. The cost of these four bridges alone would absorb to about $250,000 of subsidy, if the usual principle of asking for 15% of the cost had been followed, the Postmaster-General stated, the difficulties in the way of construction were very great, and the conditions necessitated exceptional treatment.

It is also provided that a subsidy at the usual rate and subject to the usual conditions be paid to the company towards the construction of a line from near Causapscal, Que., on the Intercolonial Ry., to Edmundston, N.B., not exceeding 160 miles, in lieu of the subsidy voted in 1906. (June, pg. 401.)

Bracebridge and Trading Lake Ry.—At the last session of the Dominion Parliament the subsidy granted in 1904 towards the construction of a line of railway from Bracebridge to Baysville, Ont., not exceeding 15 miles, was revoted, but the mileage was increased from 15 to 16. A meeting was held at Baysville, Ont., Aug. 13, when a resolution was passed in favor of the construction of the line. There has been a lot of preliminary work done in connection with the promotion of the railway, but very little in the way of actual construction. (May, pg. 329.)

Bruce Mines and Algoma Ry.—The question of the reconstruction and extension of the B.M. and A. Ry. is under consideration at Bruce Mines, Ont. The line at present extends from the lake front at Bruce Mines to Rock Lake, a total distance of about 20 miles. Since 1903, when the Rock Lake copper mine shut down, only occasional trains hauling logs and freight for the farmers in the back settlements have been run over it. The line has been in the hands of a Receiver since 1905. The company has a charter authorizing it to construct an extension to a point on the National Transcontinental Ry. (Eastern Division G.T. Pacific Ry.). Surveys have recently been made of the country through which such a line would pass, and the reports are that a line could be easily constructed, and would develop a considerable traffic. The suggestion made is that the Ontario Government should take over the present line, and extend it northerly. (Mar., pg. 179.)

Burk's Falls and French River Ry.—A subsidy upon the usual terms and conditions was voted last session of the Dominion Parliament towards the construction of a line of railway from Burk's Falls, Ont.,

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CHARLES MILLER,

PRESIDENT.

to a point on the French River, not to exceed 85 miles in length. (Nov., 1907, pg. 829.)

Canada Central Ry.—See Manitoulin and North Shore Ry.

Cape Breton Ry.—At the recent session of the Dominion Parliament a subsidy at the usual rate was voted to this company towards the construction of a line from Port Hawkesbury or Point Tupper to St. Peter's, N.S., not exceeding 31 miles, in lieu of the subsidy for 30 miles voted in 1899. This line has already been constructed, and has been operated with more or less success since 1903. It has powers under its acts to extend its line from St. Peter's to Sydney, and surveys have been made for its construction. (Mar., 1905, pg. 93). See also Cape Breton Railways, July, pg. 471.

Central Ry. of Canada.—In connection with the reported negotiations for the sale of the Irondale, Bancroft and Ottawa Ry. to the C. Ry. of C., it is understood that a price has been agreed upon, and that in the event of the sale being completed the work of extending that line will be taken in hand at once. (Aug., pg. 593.) See Irondale, Bancroft and Ottawa Ry.

Crow's Nest and Northern Ry.—A meeting of the shareholders was held at Crow's Nest, B.C., Aug. 11, for the purpose of authorizing the issue of bonds for construction purposes. (June, pg. 401.)

Death Rapids, B.C.—The Dominion Parliament last session passed an act providing, among others, for the payment of a subsidy upon the usual terms and conditions for the construction of a railway, not exceeding four miles in length, round the Death Rapids, B.C.

Delaware and Hudson Co.—The Dominion Parliament last session voted the following sums towards the construction of bridges on the Quebec, Montreal and Southern Ry., the Canadian line of the D. and H. Rd.: $15,000, bridge across Gentilly River; $30,000, bridge across Becancourt River; and $30,000, bridge across the Richelieu River. These amounts represent 15% of the estimated cost of the bridges.

The subsidy act also provided for the payment of a bonus at the usual rate towards the construction of a line from Yamaska to a point in the county of Lotbiniere, not exceeding 70 miles, and for a line from Mount Johnson to St. Gregoire station, 1.50 miles, in lieu of the subsidy granted to the United Counties Ry. in 1899. Provision was also made for new subsidies for a line from Noyan Junction to the International boundary not exceeding eight miles, and for a line from St. Lambert to St. Constant, not to exceed 15 miles in length. (June, pg. 401.)

Dominion Atlantic Ry.—The Dominion Parliament at its recent session passed an act authorizing the construction of a branch line from Centreville, on the Cornwallis Valley line, to a point on the main line at or near Aylesford, Kingston or Middleton, N.S., and the subsidies voted included one at the usual rate for such a line not to exceed 35 miles in length. A subsidy was also voted for the construction of a line from Brazil Lake to Kemptville, not exceeding 11 miles, in lieu of that granted in 1900. (Mar., pg. 179.)

Eastern British Columbia Ry.—We are officially advised that construction has been started on the line from McGillvray station on the C.P.R. Crow's Nest Line, southerly along Michel Creek, B.C., to the coal mines being developed by D. C. Corbin, of Spokane, a distance of 14 miles. It is expected that the line will be completed and in operation by the end of October. (Aug., pg. 547.)

Eastern Townships Ry.—At the last session of the Dominion Parliament a subsidy at the usual rate was voted towards the construction of a railway from St. Leonard's Junction, on the Intercolonial Ry., to Dudswell, Que., a distance of 36 miles. Dudswell Junction is the point on the main line of the Quebec Central Ry. at which the Hereford Ry., the Maine Central Rd. line to Lime Ridge, crosses. (April, 1907, pg. 243.)

Erie, London and Tillsonburg Ry.—At the recent session of the Dominion Parliament a subsidy at the usual rates and upon the usual conditions was voted to the E.L. and T. Ry. towards the construction of a railway from Port Burwell to London, Ont., not exceeding 35 miles. It was stated in the course of the discussion that the railway was intended to run from Port Burwell through the township of Malahide, the town of Aylmer and the village of Belmont into London. The charter was originally held for an electric railway, but it was found impossible to finance it, and the present company stepped in and obtained a charter of incorporation. The representations made to the Minister of Railways were to the effect that at present sufficient facilities were not afforded for getting in the coal supplies to western Ontario. The company also secured an extension of time for the construction of its line at the recent session. (Mar., pg. 181.)

Ha Ha Bay Ry.—At the last session of the Dominion Parliament a subsidy at the usual rate was voted towards the construction of a railway from near Jonquieres Village, via Laterrieres Village, to Baie des Ha Ha, Que., not exceeding 24 miles, in lieu of the subsidy for 20 miles voted in 1906.

Press reports state that the Ha Ha Bay Ry. Co. is arranging a contract for the construction of a railway from between Jonquieres, on the Quebec and Lake St. John Ry., to Bagotville, on Ha Ha Bay, where there is a deep water harbor suitable for sea-going vessels. This line will have a total length of about 20 miles, but it is the intention of the company to ultimately extend the line to St. Catherines Bay, at the mouth of the Saguenay River, and to effect a junction there with the Quebec and Saguenay Ry., a projected electric railway from the present terminus of the Quebec Ry., Light and Power Co.'s line.

The Quebec and Lake St. John Ry. extends to Chicoutimi, east of Jonquieres, and the Dominion Parliament last session voted a subsidy for an extension from that point southerly or southeasterly for a distance of five miles. (June, pg. 403.)

Halifax and South-Western Ry.—At the recent session of the Dominion Parliament a subsidy at the minimum rate of $3,200 a mile, increasing to $6,400 a mile in proportion to the cost of construction, was voted for a line 12 miles in length from Lunenburg to Bridgewater, N.S., via Upper La Have. The H. and S.W. Ry. already has a connection between Lunenburg and Bridgewater, these towns being served by the old Nova Scotia Central Ry., which was amalgamated, and the portion between Mahone Junction and Bridgewater being incorporated in the main line of the H. and S.W. Ry. from Halifax to Yarmouth, Lunenburg being placed on a short branch. The projected line would serve some points not now having a railway connection. (May, pg. 331.)

Halifax and Northeastern Ry.—In 1906 the Dominion Parliament granted a subsidy towards the construction of a railway from a point on the Intercolonial Ry. at or near Dartmouth, N.S., to Guysboro, with branch lines to the Intercolonial Ry. near New Glasgow, and to Country Harbor, not exceeding in the whole 236 miles, in lieu of the subsidies voted in 1903, for 116 and 120 miles respectively. At the recent session of Parliament a subsidy was voted for a line from Dartmouth to a point near Dean's Settlement, not exceeding 80 miles, in lieu in part of the subsidy of 1906. The following subsidies were also voted in lieu of those voted in 1906 already mentioned: For a line from Dean's Settlement to Melrose, not exceeding 52 miles; for a line from New Glasgow to Melrose, and from Melrose to Guysborough, with a branch to Country Harbor, not exceeding 116 miles. The question of the construction of a line in this part of Nova Scotia has been taken up by several companies during the past six or seven years, but beyond the making of surveys nothing has been done. The Nova Scotia Government has taken powers to grant material assistance to any company undertaking to construct the line whether under the charter of the Halifax and Northeastern Ry. or otherwise. (May, pg. 329.)

Hudson Bay Pacific Ry.—A press report states that a contract for grading the first 10 miles of this railway from the Pacific Coast to Fort Churchill has been let to J. Haggarty, Victoria, B.C. (April, pg. 245.)

Intercolonial Ry.—M. J. Butler, Deputy Minister of Railways, said in the course of an interview at St. John, N.B., Aug. 6: "It is the ultimate object of the Government to double-track the whole of the Intercolonial Ry. It may take some time to complete the work, but surveys will be completed between Moncton and Halifax as soon as possible. The great increase in traffic on that section renders double-tracking a necessity. The survey has been made for some distance below Moncton, and will be completed in the course of a few weeks."

The Dominion Parliament at its recent session voted the following sums on account of betterments, etc., in addition to the amounts already reported:

To increase water supply	$ 7,500.00
Increased accommodation and facilities	21,690.00
Diversion of line, Sydney Mines to River George, N.S.	25,000.00
Stellarton, N.S., increased accommodation (revote $5,000)	22,000.00
Survey to ascertain the best route for an additional line from Moncton, N.B., or Amherst, N.S., to near Truro, N.S.	10,000.00
Avondale, N.B., subway	10,000.00
Fredericton, N.B., improvements	10,000.00
Chatham, N.B., diversion of line and branch to wharves	40,000.00
Fort Lawrence, Que., laying rails on wharf	12,500.00
Diversion of public road near St. Cyrille to eliminate level crossing	1,300.00
Petit Rocher, N.B., spur track	25,000.00

Replying to a question during the discussion on the vote of $10,000 for surveys on branch lines for the Intercolonial Ry., the Minister of Railways said the question of taking over the branch lines in New Brunswick was a very large one. If he were Manager or President of a company owning the Intercolonial he would at once proceed to see what branch lines would be of benefit to the main line and try to get hold of them. (Aug., pg. 547.)

International Ry. of New Brunswick.—At the last session of the Dominion Parliament a subsidy was voted for a line of railway from the western end of the 20 miles as already constructed from Campbellton, N.B., to a point on the St. John River between Grand Falls and Edmundston, N.B., a distance of 90 miles, in lieu of the subsidy voted in 1903. The Chief Commissioner of Public Works of New Brunswick has approved of maps, etc., of the right-of-way, and lands required by the company, between mileage 0 and mileage 20 in the County of Madawaska, and between mileage 20 and mileage 40 in the county of Victoria. (Aug., pg. 547.)

Interprovincial Ry. Bridge of New Brunswick.—The Dominion Parliament last session passed an act extending the time for

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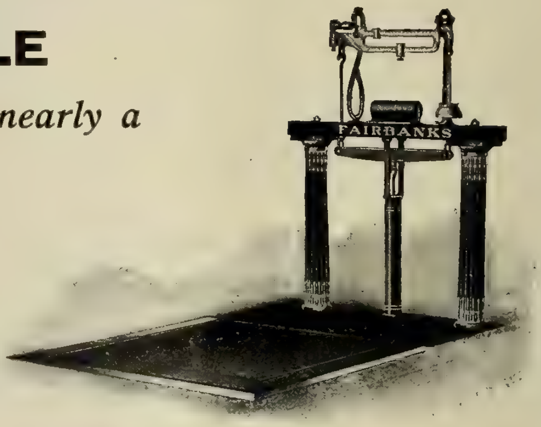

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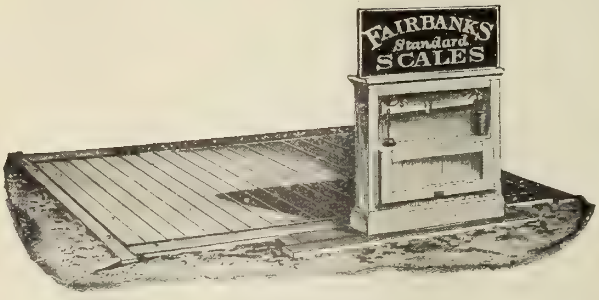

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construction and voted an amount not exceeding $160,000 towards the construction and completion of a railway bridge over the Restigouche River from Campbellton, N.B., to Mission Point, Que. The bridge is estimated to cost from $650,000 to $750,000, and its construction is projected with a view of securing a connection for the International Ry. of New Brunswick with the Atlantic and Lake Superior Ry. (Mar., pg. 181.)

Inverness Ry. and Coal Co.—Last session of the Dominion Parliament a subsidy was voted to aid in the construction of a railway from Cheticamp, N.S., to a point on the line already constructed between Broad Cove and Point Tupper, a distance of about 37 miles, in lieu of the subsidy voted in 1903. (Nov., 1904, pg. 428.)

Irondale, Bancroft and Ottawa Ry.—It is understood that negotiations are in progress with a view to extending this railway from the point of junction with the G.T.R., near Kinmount, to a point on the Georgian Bay, and from the present terminus near Bird's Creek to Montreal. We are advised that the negotiations have not yet reached a point when a definite announcement can be made.

Last session of the Dominion Parliament the subsidy voted in 1906, for a line from a point at or near Baptiste, easterly to Renfrew, not exceeding 75 miles, was revoted. Baptiste is the name of a station near the present terminus of the I.B. and O. Ry., and Renfrew is the point where its terminus is to be situated to conform with the subsidy vote of the Ontario Legislature.

The Toronto and Nipissing Eastern Extension Ry. was incorporated by the Ontario Legislature in 1880, with power to construct a railway from a point on the Georgian Bay to Ottawa. In 1884 the name of the company was changed to the Irondale, Bancroft and Ottawa Ry., and its powers have been confirmed and extended from time to time. By one statute it was provided that the terminus of the line should be at Renfrew, and one of the subsidy grants provided for the construction of the line from Bird's Creek, the present terminus, easterly, either by the I.B. and O. Ry., or by the Toronto, Lindsay and Pembroke Ry. By an act of the Ontario Legislature passed in 1907 the payment of the subsidy for the eastern extension of the line was extended to 1910. The line extends from I.B. and O. Junction on the G.T.R. line to Haliburton, via Irondale, to Baptiste, near Bancroft, 50 miles. (July, 1905, pg. 285.)

Kettle Valley Lines.—The Dominion Parliament at its last session revoted the subsidy of $3,200 a mile, increasing conditionally to $6,400 a mile, voted in 1906, for a line from Grand Forks, B.C., up the North Fork, and the East or West Fork of the Kettle River, not exceeding 50 miles. The Minister of Railways said in the House of Commons, when the vote was under discussion, that a 20 mile section of the line, which is being constructed under the charter of the Kettle River Valley Ry., is under construction, and that the total mileage which the company had in contemplation was probably over 200. The company operates a line from Grand Forks, B.C., to Republic, Wash., and has completed plans for the extension of the line from Republic to Spokane. (May, pg. 331.)

Lac Seul, Rat Portage and Keewatin Ry.—At the last session of the Dominion Parliament, a subsidy was voted towards the construction of a line of railway from a point at or near Kenora, Ont., to the line of the National Transcontinental Ry., not exceeding a distance of 18 miles. (May, pg. 331.)

L'Avenir and Melbourne Ry.—At the last session of the Dominion Parliament a subsidy at the usual rate, and upon the usual conditions, was voted towards the construction of a line of railway from Melbourne to Drummondville, Que., not to exceed 28 miles in length. (June, pg. 403.)

Little Nation Ry.—A subsidy was voted last session of the Dominion Parliament for the construction of a railway from Papineauville, on the C.P.R., towards Nominingue, Que., for a distance not exceeding 30 miles. It was stated in the course of the discussion that the Little Nation Ry. Co. had not made formal application for the subsidy, when it was decided to recommend one, but it was available for that company. (July, pg. 471.)

Lotbiniere and Megantic Ry.—The Dominion Parliament last session voted subsidies in lieu of those granted in 1906, as follows: For a line to extend its railway southerly from a point at or near Lyster, Que., to or near Lime Ridge, Dudswell tp., a distance not exceeding 50 miles; and for a line from a point on its line in the township of Inverness to the Quebec Bridge, not exceeding 30 miles. (June, pg. 403.)

MacLeod, Cardston and Montana Ry.—At the last session of the Dominion Parliament a subsidy was voted towards the construction of a railway from MacLeod, Alta., via Cardston, towards a point on the International boundary, west of range 21, not to exceed 45 miles in length. (June, pg. 405.)

Manitoulin and North Shore Ry.—In 1906 the Dominion Parliament voted subsidies to the M. and N.S. Ry., towards the construction of a number of lines of railway in the vicinity of Sudbury, and connecting the mainland of Ontario with Little Current, Manitoulin Island. At the recent session of the Dominion Parliament these subsidies were revoted, a provision being inserted in the act authorizing the granting of the subsidies to the Canada Central Ry., in lieu of the M. and N.S. Ry., with the consent of that company and subject to the approval of the Governor in Council. The lines subsidized are as follows: From a point on the railway between Little Current and Sudbury, westerly towards the Algoma Central and Hudson's Bay Ry., not exceeding 100 miles, from Little Current, crossing the C.P.R. at or near Stanley, and thence to Sudbury, not exceeding 64 miles; from a point at or near Sudbury, northerly, not exceeding 30 miles. The company has constructed 16.50 miles of line connecting Sudbury with a number of mining properties, and with a pulp mill at Spanish River. (June, pg. 405.)

Margaree Coal and Ry. Co.—At the last session of the Dominion Parliament subsidies were voted for the construction of the following lines of railway, in lieu of those totalling 38 miles granted in 1907: From near Orangedale, N.S., on the Intercolonial Ry., via the east side of the village of Lake Ainslie and Ste. Rosa, to Chimney Corner Cove, N.S., not exceeding 40 miles; and for a line from the Intercolonial Ry. between Orangedale and Point Tupper to Caribou Cove on Inhabitants Bay or River, not exceeding four miles. (Aug., 1907, pg. 563.)

Maritime Coal, Ry. and Power Co.—The Dominion Parliament at its recent session voted a subsidy of $3,200 a mile, with the usual provision for its being increased up to $6,400 a mile, for the extension of the company's lines from Chignecto to a point on Northumberland Straits, not exceeding 25 miles, and for a line from Joggins Mines to a point on Chignecto Bay, N.S., not exceeding one mile. (Sept., 1907, pg. 663.)

Matane and Gaspe Ry.—In 1906 the Dominion Parliament voted a subsidy towards the construction of a section of 30 miles of its projected railway, and at the recent session voted a subsidy in lieu thereof, for a line from Ste. Flavie, on the Intercolonial Ry., to Matane, Que., a distance not exceeding 38 miles.

A contract is reported to have been let to H. J. Beemer & Co., New York, for the construction of the line between Ste. Flavie and Matane, with side tracks, etc. A further report states that the contractor began work at Ste. Flavie Aug. 5. Following are the officers and directors for the current year: President, Hon. P. A. Choquette; Secretary, R. Dupont; other directors: J. G. Scott, Dr. Ross, M.P.; C. A. Gauvreau, M.P.; D. Caron, M.P.; Rev. J. Soucy, H. J. Beemer, of New York; H. J. Lyons, of Montreal; A. Fortin. (June, pg. 405.)

New Brunswick Coal and Ry. Co.—J. R. Stone, one of the Commissioners for the operation of this railway on behalf of the New Brunswick Government, on his return to St. John, after an inspection of the line in company with P. S. Archibald, C.E., the other commissioner, said the principal work of betterment now going on was the ballasting of the line. About 100 carloads per day were being obtained from the Belleisle ballast pit, but the funds at the disposal of the Commissioners would not permit them to do more than about one-half of the ballasting necessary during the current season. (Aug., pg. 547.)

Nipissing Central Ry.—At the last session of the Dominion Parliament a subsidy upon the usual terms and conditions was voted towards the construction of a line from a point on the Temiskaming and Northern Ontario Ry. near New Liskeard, Ont., to a point in the township of Guigues, Que., not exceeding 13 miles. (May, pg. 353.)

North-Eastern Ry.—At the last session of the Dominion Parliament a subsidy was voted in aid of the construction of a line, from a point east of Lake Temiskaming, at or near Ville Marie, Que., easterly for a distance not exceeding 25 miles.

North Shore Ry.—A subsidy at the usual rate was voted at the last session of the Dominion Parliament to this company, which took over the line of the Beersville Coal and Ry. Co., towards the construction of the following lines: From Beersville to Brown's Landing, seven miles, and for a branch from the main line to Mount Carlyle, 2.50 miles. The object of the extension to Brown's Landing is to enable the company to ship the output of the Imperial and other coal mines, which its line serves, by water as well as by rail. (Mar., pg. 183.)

Ontario Northern and Timagami Ry.—The Dominion Parliament last session granted a revote of the subsidy voted in 1906 towards the construction of this railway, viz., for a line from near Sturgeon Falls, Ont., in a northwesterly direction to a point on the western shore of Lake Timagami, a distance not exceeding 50 miles. (April, 1906, pg. 193.)

Owen Sound and Meaford Ry.—The subsidy voted at the session of the Dominion Parliament in 1906 for the construction of a line between Owen Sound and Meaford, Ont., not exceeding 30 miles, was revoted at the recent session. The Manitoulin and North Shore Ry. has charter powers to construct a railway between these points, but not having done anything to carry it out, Owen Sound people obtained a charter of incorporation with this title, and in 1906 was given power to enter into arrangements for the construction of the railway, if the M. and N.S. Ry. failed to start construction work within a given time. No work has been done to date, but there has been a lot of negotiation going on with various companies with a view of the line being constructed. (May, pg. 333.)

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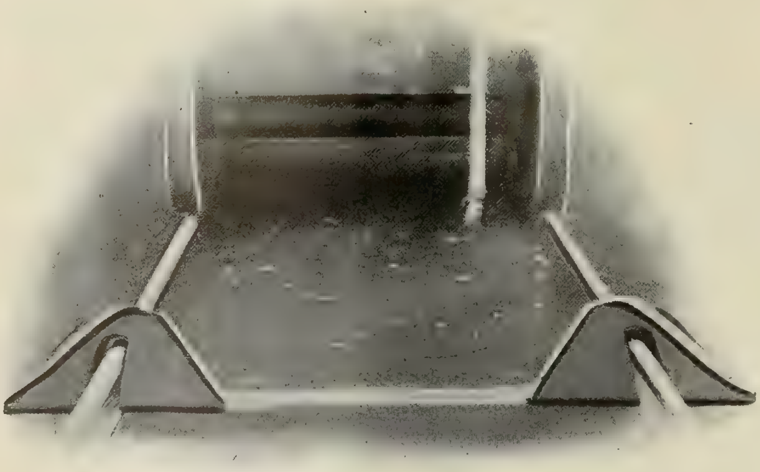

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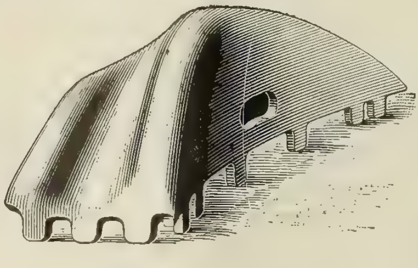

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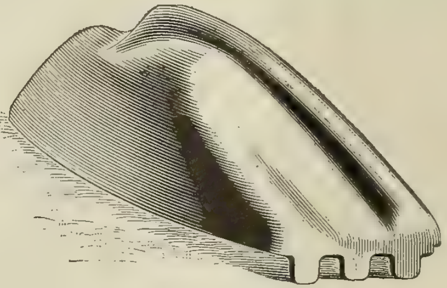

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Orford Mountain Ry.—We are advised that during the season of 1907 the company graded about three miles from Mansonville, Que., southerly towards North Troy, Vt., and that track was laid for 2.50 miles. The total distance from Mansonville to North Troy is 4.50 miles. It is expected that the extension will be completed this season. The work is heavy clay cuttings, with very little rock. The work is being done directly by the railway company, under the charge of R. K. Harris, Chief Engineer. (Aug., pg. 547.)

Port Arthur Terminal Railway.—The city council of Port Arthur, Ont., have had under discussion a project for the construction of a terminal railway. The proposition is that the city construct a line from the vicinity of Arthur St. to Bare Point, the purpose of which would be to give railway connection with the C.P.R., Canadian Northern Ry., and the G.T. Pacific, for any industries which may locate along the water front. The railway, being owned by the city, it would not be necessary to give away any street crossings or other rights, and at the same time connection would be given between the factories and the lines of all all companies doing business in the city.

Prince Edward Island Ry.—The bill passed at the recent session of the Dominion Parliament authorizes the Government, if it sees fit, to construct a branch about 13 miles, from Harmony, on the Souris branch, to Elmira. It will serve a very important district, where there are several sections thickly settled which are without railway communication. The line, it was estimated, would cost about $400,000. The Prince Edward Island Legislature at its recent session passed a resolution asking for the construction of several branch lines, of which this was one. The Government has selected this branch for immediate construction, it being all that could be undertaken this year. The amount voted by Parliament for this work at the recent session was $31,000. We are advised that construction will be started as soon as the surveys are completed.

In addition to these sums, and others previously recorded, the Dominion Parliament voted $2,550 for land purchase, and $10,000 for the survey of branch lines as follows: Montague to a point on the Murray Harbor branch; alternative routes from a point on the main line to New London; and from Stanley to the main line at Royalty Junction or Mount Stewart, or an intermediate point.

The amount awarded by C. Schreiber, C.M.G., sole arbitrator, to M. J. Haney on his contract for the construction of the Hillsboro River bridge, is $164,633.33, which amount was voted at the last session of the Dominion Parliament. The total cost of the bridge to June 30, including the amount of the award, has been $1,365,376.18. (Aug., pg. 547.)

Quebec Bridge and Ry. Co.—At the last session of the Dominion Parliament an act was passed authorizing the Governor in Council, pursuant to the terms and conditions of the agreement set out in the schedule of chap. 54 of the statutes of 1903, to exercise the right to take over the whole undertaking, assets, property and franchises of the Q.B. and Ry. Co. The second section authorizes the Minister of Railway and Canals to employ engineers to prepare plans and specifications for the reconstruction and completion of the bridge, or for the construction of a bridge to serve the same purpose as was intended to be served by the company's collapsed bridge, on the same or some other site at or near Quebec, as is recommended by the engineers appointed; and that the Minister shall apply to such work whatever sums may be voted therefor by Parliament, including the sum of $25,000 voted at the recent session.

The agreement referred to provided that the Government having guaranteed the company's bonds, could at any time take over the property and undertaking of the company, upon giving one month's notice of its intention, paying the shareholders the amount of their stock at par value, not exceeding $265,585.70, with simple interest at 5%, and an addition of 10% on the par value of fully paid-up shares, and assuming the approved obligations of the company for construction, operation and maintenance, according to the terms of the bonds and mortgage securing the same.

Under the terms of section 2 of the act, the Government, Aug. 13, appointed H. E. Vautelet, C.E., Montreal; M. FitzMaurice, C.M.G., London, Eng., and R. Mojeski, Chicago, Ill., to be the board of engineers to draw plans for the reconstruction of the bridge. H. E. Vautelet, who was formerly in the employ of the C.P.R., is the chairman of the board. (Aug., pg. 547.)

Quebec Central Ry.—At the last session of the Dominion Parliament a subsidy under the usual terms and conditions was voted for an extension of the line from St. George, to or towards Ste. Justine, Que., not exceeding 30 miles. (June, pg. 405.)

Quebec and New Brunswick Ry.—The Dominion Parliament last session voted a subsidy at the usual rate, and upon the usual conditions, towards the construction of a railway from Chaudiere Junction, on the Intercolonial Ry., to a point at or near the International boundary, not exceeding 80 miles, in lieu of a subsidy voted in 1901.

During the course of the discussion in the House of Commons it was stated that the line was originally projected to run from near Chaudiere Junction to Connors in N.B., where it was to connect with a line coming up the St. John River Valley. Some construction was done in New Brunswick about 1903. Since that date the National Transcontinental Ry. had been placed under construction, and the surveys for that line had included some portion of the right-of-way of this line. As a result the company had secured powers to move its line further to the south, so as to keep clear of the N.T. Ry. The subsidy for the New Brunswick end of the line was revoted in 1907, and the present vote was to revive the subsidy for the Quebec end of the line, making the conditions conform to the altered circumstances. The Minister of Public Works in supporting the subsidy said the people of the St. John Valley had been looking for the construction of a line of railway along the valley ever since railway construction had begun in Canada. When the Intercolonial Ry. was projected many thought that it would be constructed along the valley, but it was decided to carry the line along the north shore of New Brunswick. When the National Transcontinental Ry. was projected it was thought it would be carried along the valley, but after the surveys were made that line was located back from the river, going through the centre of the province. So eager were the people of the province for a line through the valley that the Legislature had authorized the Government to guarantee the bonds of any railway company constructing the line, to the extent of $15,000 a mile, on condition that it became part of a trunk line. "As I understand the proposition of the gentlemen who, with Mr. Costigan, are promoting this charter and asking for this subsidy," said the Minister, "is that they will carry their line from the Chaudiere Junction near Quebec, cross the International boundary and go through the state of Maine at its northern part, where it is comparatively narrow, instead of going up around the angle of the St. Francis River in the province of New Brunswick. It will cross the northern part of the state of Maine, and connect there with a road down the St. John Valley, and make this road a part of the St. John Valley system. I do not know whether that can be carried out; but I would say that if the line, as these gentlemen are proposing to have it constructed, is constructed to a point on the St. John in the vicinity of Grand Falls, it will give a great impetus to the construction of a line down the St. John Valley. If it does not form part of such a through scheme, it will never be built, because capitalists will not put their money into a local line. If built as a through scheme, it will be of enormous advantage to a country 290 miles in extent, and one of the most fertile portions of Canada, and which is to-day without the railway facilities enjoyed by most of the older sections of the Dominion." (June, pg. 405.)

Quinze and Blanche River Ry.—We are advised that the consignments of rails recently received at New Liskeard, Ont., and stated in press reports to be for a Liskeard Electric Ry., are for the Q. and B.R. Ry. The grading work being done at the first chute of the Quinze River is also being done for this company. The construction work is in charge of D. A. McNaughton. See Murray City to New Liskeard, Ont., (Aug., pg. 547.)

Red Deer to Rocky Mountain House.—The Dominion Parliament last session voted a subsidy towards the construction of 70 miles of railway from at or near the town of Red Deer, Alta., to a point on the North Saskatchewan River, near Rocky Mountain House.

St. Maurice Valley Ry.—At the recent session of the Dominion Parliament a subsidy was voted towards the construction of a line 28 miles in length from Three Rivers to Grand Mere, Que. (Aug., 1907, pg. 563.)

Southern Central Pacific Ry.—At the recent session of the Dominion Parliament a subsidy was voted to the S.C.P. Ry. Co., towards the construction of a railway from a point at or near Cowley, Alta., to the Highwood River, not exceeding 50 miles. It was stated that the charter of the S.C.P. Ry. was about to expire, and the Minister of Railways said if the company did not make progress the Government would be in a position to take up the question of construction with another company, which has a charter covering the same territory.

The S.C. Pacific Ry. Co. was incorporated by an act of the Dominion Parliament in 1903, for the purpose of constructing a railway from Vancouver, northerly and easterly via Kootenay Pass, to Old Man River, and thence to Churchill River on Hudson Bay. (June, 1903, pg. 218.) See also Alberta and British Columbia Ry.

Thessalon and Northern Ry.—The Dominion Parliament last session voted a subsidy in aid of the construction of a line of railway, not to exceed four miles in length, from Thessalon, Ont., in a northerly direction. (Feb., pg. 101.)

Temiskaming and Northern Ontario Ry.—It was reported Aug. 14 that the line of the T. and N.O. Ry. was within 10 miles of Nellie Lake, and that if the weather remained favorable, track would be laid to the point of junction with the right-of-way of the National Transcontinental Ry. (Eastern Division G.T. Pacific Ry.) early in October.

The question of the construction of a joint station at North Bay for the T. & N.O. Ry. and the G.T.R. is under consideration. The present arrangement by which the G.T.R. and the T. and N.O. Ry. depend upon the C.P.R. for terminal facilities at North Bay is unsatisfactory, and is likely to be terminated very shortly. (Aug., pg. 549.)

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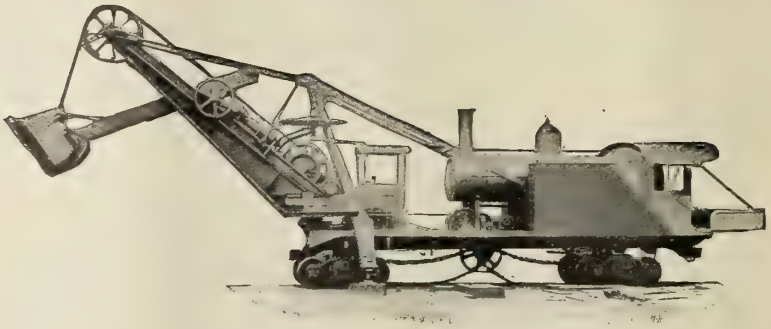

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Trans-Canada Ry.—A survey party has been placed in the field with a view of locating a line from Roberval to the mining country through which the Chibougamo River runs, about 200 miles westerly. (July, pg. 473.)

Tusket Wedge Ry.—The Dominion Parliament at its recent session voted a subsidy of $3,200 a mile, with the usual provision for an increase to $6,400 a mile, for a line from Tusket Wedge to a point on the Halifax and South-Western Ry. near Riverdale, not exceeding eight miles. (April, pg. 247.)

Vancouver Island and Eastern Ry.—The railway subsidies act passed at the recent session of the Dominion Parliament makes provision for the payment of a subsidy upon the usual terms and conditions, towards the construction of a railway from a point upon the Esquimalt and Nanaimo Ry. near Campbell River, or Vancouver Island, B.C., towards Fort George, B.C., on the line of the G.T. Pacific Ry., now under construction for a distance not exceeding 100 miles. (July, pg. 473.)

Vancouver, Westminster and Yukon Ry.—A subsidy amounting to $200,000 was voted last session of the Dominion Parliament towards the construction and completion of a railway bridge across Burrard Inlet, B.C. The estimated cost of the bridge is about $1,250,000. The subsidy act also provides for the payment upon the usual terms and conditions of a grant towards the construction of a line of railway from Vancouver, for a distance not exceeding 100 miles, in the direction of Fort George, on the G.T. Pacific Ry. (Jan., pg. 23.)

York and Carleton Ry.—At the last session of the Dominion Parliament a subsidy at the rate of $3,200 a mile, with the usual condition as to an increase to $6,400 a mile, was voted in aid of the extension of this line from its present terminus to a junction with the Eastern Division G.T. Pacific Ry. (National Transcontinental Ry.), not exceeding nine miles. (Aug., pg. 549.)

The C.P.R. and the Customs Department.—An action has been entered in the Exchequer Court by the Department of Customs to recover from the C.P.R. an amount of $236,206.70, for irregularities in connection with the passing of supplies, etc., through the customs during 1904–05. The amount is made up of three sums, viz., sums due on goods of which either no entries had been made, or on which it is alleged an under-valuation had been placed by the company's agent, amounting to $44,406.70; the sum of $31,900, claimed as double forfeiture on a charge of bridge material alleged to have been entered as scrap iron, and, finally, the sum of $160,000 which the company had placed with the Government as bond for the faithful representing of goods carried by the company through the customs. The charges are somewhat similar to those made about two years ago, when it was discovered that D. Hobbs, who had charge of the work of passing goods through the customs for the C.P.R., had been defrauding the Government as well as the C.P.R. by falsifying entries, etc. Hobbs was found guilty and sentenced to seven years in the penitentiary.

Hon. J. A. Calder, a member of the Saskatchewan Government, has been appointed Commissioner of Railways, Telegraphs and Telephones, for that province.

The Canada North-West Land Co. will return a further amount of $4 per share to its shareholders Oct. 15. After the last distribution of capital the outstanding stock was valued at $294,073, representing 58,814.6 shares at $5 a share. The company took over 1,928,318 acres of land from an English company in 1893, and at the end of Dec. had remaining 526,017 acres unsold.

Regulations Respecting Wooden Trestles.

The Board of Railway Commissioners has passed the following order no. 5103, July 31, and has rescinded order no. 3239, July 3, 1907. In pursuance of the powers conferred upon it by the Railway Act, secs. 30 and 269, and of all other powers possessed by the Board in that behalf:

Every railway company subject to the legislative authority of the Parliament of Canada, operating by steam power any railway or railways, any part or parts of which is or are constructed of or upon wooden trestles, shall during the months of May, June, July, August, September, and October of each year, provide, place, and keep a watchman, track-walker, fire alarm signals, ballast flooring, or fireproof paint, as hereinafter directed, for the purpose of protecting the said trestles from fire, and thereby preventing trains from being burned, derailed, or otherwise damaged at or on such trestles—each such company being allowed the option of adopting any one of the said foregoing methods of protection.

2. Every such company shall place and maintain at each end of every wooden trestle on its line or lines of railway, a barrel of a capacity not less than 45 gallons; and on every such trestle over 200 ft. long, shall place and maintain barrels of similar capacity at distances of not less than 150 ft.; provided, however, that pile trestles over streams or other bodies of water need not be furnished with any such barrels.

3. Every such company shall keep and maintain the said water-barrels in good repair and good condition for holding water and see that they are kept full of water at all times.

4. Every such company shall remove all brush and dead grass from beneath and around every such trestle, and keep the whole width of its right-of-way under and along every such trestle free from all kinds of combustible material.

5. Every such special watchman or track-walker, on or in the neighborhood of timber lands and in localities distant from settlement shall carry a pail, or satisfy himself that a pail is at each of the different trestles under his care, in such a place that it cannot be taken away or used for any other purpose than that for which it was provided.

6. Where the protection provided is by a track-walker, all trestles, long and short, shall be regularly inspected—two inspections to be made every 24 hrs. on main lines, and one every 24 hrs. on branch lines.

7. Every such special watchman or track-walker, whenever any such trestle is injured by fire, shall, as soon as possible thereafter, report the same to the roadmaster on whose division he is working; and in the event of any such barrel or pail not being in good and efficient condition for the holding of water, every such special watchman or track-walker having charge of the same shall promptly report such condition to the said roadmaster; and whenever the height of water in any such barrel is lowered by evaporation or otherwise, say, 10 ins. from the top of the barrel, every such special watchman or track-walker shall promptly report such condition to the said roadmaster.

8. Every such railway company failing or neglecting to comply with any of the foregoing regulations shall be subject to a penalty of $30.

9. Every such special watchman or track-walker failing or neglecting to make inspection of any such trestle in accordance with the foregoing regulations, or failing or neglecting to make any of the reports hereinbefore required of him and as so required, shall be subject to a penalty of $15 for each such failure or neglect.

10. That the order of the Board no. 3239, dated July 3, 1907, be rescinded.

Key Harbor Ore Docks, Etc.

The Canadian Northern Ontario Ry. has completed its ore docks, etc., at Key Harbor, Georgian Bay, for the shipment of iron ore from the mines at Moose Mountain.

The dock is reached from the Georgian Bay in four ranges, with ample room for large vessels at the turns and room to turn at west end of dock. Ranges and flags have already been set out by the Marine Department to mark the channel, and gas buoys are to be placed where necessary as soon as required.

The trestle approach, which is 1,600′ long, varies from 10′ to 30′ in height, and is a standard 4 post timber trestle on rock foundation, bents 15′ centre to centre, caps, posts and sills, 12″ x 12″; braces, 3″ x 10″; stringers, 8″ x 16″; 3 under each rail; ties, 8″ x 8″, 4″ apart; guard rail, 8″ x 8″. The trestle over ore stock pile is 500′ long, and 30′ high; spans, 12′ centre to centre; timber, 12″ x 12″; floor, 4″ planking. The tunnel under trestle is 500′ long and 6′ deep, being constructed of timber 12″ x 12″ on the sides, tunnel 6′ wide by 5′ high, with A shaped roof on top 11′ 3″ high over all of 12″ x 12″ and 4″ x 13″ timbers, sheeted with 3″ plank and with valve openings 12″ x 24″, 6′ centre to centre on each side and at bottom of A shaped roof. The belt conveyor in tunnel is 36″ wide and 1,096′ long, with a capacity of 800 tons an hour. The belts are of 6 ply best grade rubber, made especially for the work with heavy wearing surface. The scale house is 47′ x 8′, equipped with an automatic and continuous weighing and recording machine. The conveyor from scale house to ore dock is a belt 3′ wide and 950′ long. The length of conveyor from scale house to ore dock is 465′, the difference in elevation from lower end near stock pile to upper end on ore pockets is 65′. The conveyor trestle from stock pile to ore pockets is a three-post trestle on rock-filled timber cribs. Capacity of belt 800 tons an hour.

The ore docks have a capacity of 2,000 tons, with 20 shipping pockets with a storage capacity of 100 tons each. The ore dock is 440′ x 28′ and 4′ above water, built of piles and backed by rock-filled timber crib and decked with 3″ planking. The ore pockets are 240′ x 24′, and 57′ 9″ high above dock. Bents 6′ centre to centre, 7 posts to each bent, sides of pockets lined with 3″ plank, bottoms 4″ plank with additional lining of 3″ hardwood wearing surface

The power plant, which is located in a concrete building 48′ x 44′, consists of 2 return tubular boilers 67″ x 18′, 150 lbs. steam pressure; one steam-driven 200 k.w. alternating current generator, 600 v. 200 r.p.m., direct connected to 17″ x 20″ automatic engine, 390 h.p. maximum capacity; one 10″ x 7″ x 12″ duplex pump, 300 gals. a minute capacity for fire protection. One 50 h.p. and two 75 h.p. induction motors are located at discharge end of belting.

The low level dock is 50′ x 26′, built of piles capped with 12″ x 12″ timbers and decked with 3″ planking, with pile track trestle approach about 500′ long, so that cars can be run on to the dock for the transfer of freight or passengers. Height of dock above water 4′, and depth of water 15′.

The chief engineering features of construction consist in bringing the ore from the mine by train on to the stock pile trestle and discharging it from the cars on to the ground in a long pile. Below the level of the ground under the centre of the trestle and running the whole length of it is the tunnel in which the endless rubber belt supported on rollers works. When the valves at foot of A shaped roof are opened by the operator inside, the ore (which has already been crushed at the mine to a size suitable for handling on a belt) is delivered

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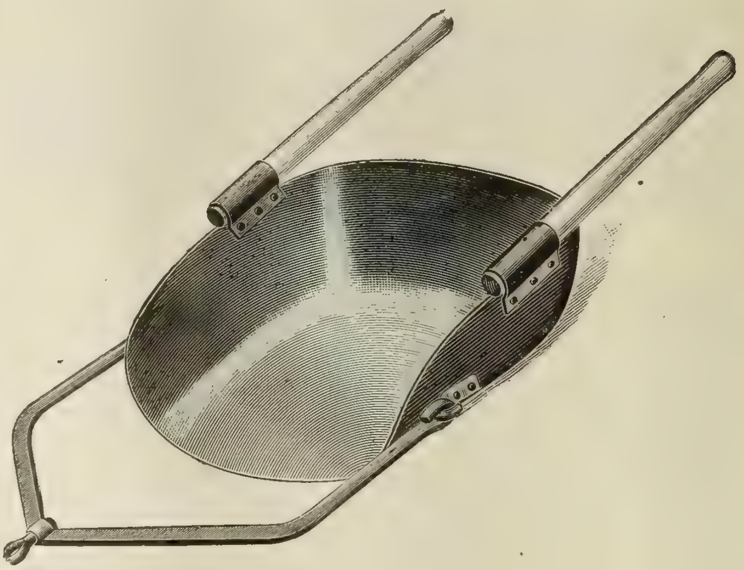

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1—50-ton Standard Gauge Locomotive with tender.
1—Combination Passenger Coach.
2—No. 43¼ "LITTLE GIANT" Steam Drills.
2—Single Drum Horse Power Hoists.
1—No. 1 Railroad Plow.
6—No. 2 Wheel Scrapers.
6 Standard Gauge Two-Way "WESTERN" Pattern Dump Cars, 6 yd. capacity.
1—Blake Duplex Steam Pump, 6 x 4 x 6.
4—"WESTERN" Horse Cars, 1½ yd. Capacity, Side and End Dump.
2—Horizontal Boilers.
45—Tents, 12′ x 15′.
Also a miscellaneous assortment of Tools, such as Bellows, Anvils, Hammers, Mattocks, Shovels, Wheelbarrows, etc., etc.

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by its own weight through sheet steel hoppers on to the belt, and is carried along on the belt and discharged on to another similar belt, which elevates the ore to the top of the ore pockets, a height of 65′, and discharges it on to still another belt running along the top of the ore pockets, and this belt discharges the ore into any of the 20 ore pockets desired by means of a self-propelling dripper mounted on a suitable track for it to run on. From the pockets the ore is discharged into vessels by means of a gate at bottom of the pocket into a half-round spout about 4′ wide and 30′ long, made of sheet steel, which can be raised or lowered to suit vessels by a winch on top of the pockets. Just before the ore leaves the first or stock pile belt, it is weighed in the scale house as the belt travels along, and without the necessity for stopping the belt, by the continuous weigher already referred to.

The construction engineer was R. M. Pratt, of the Canadian Northern Ry. staff, and the contractors Mackenzie, Mann & Co., Ltd. The cost of construction was about $500,000.00. Construction was commenced in May, 1907, under Hugh Sutherland, Executive Agent for the Canadian Northern Ry. at Winnipeg, and in October it was turned over to W. H. Grant, Manager of Construction, Mackenzie, Mann & Co.'s eastern lines. No work was done during Dec., 1907, or Jan. and Feb., 1908. From March 1 construction went on continously, and the work was completed and the plant ready for ore shipments early in August.

September Birthdays.

Many happy returns of the day to—

G. W. Alexander, Local Treasurer G.T.R. Western Lines, Detroit, Mich., born at Lightcliff, Yorkshire, Eng., Sept. 10, 1859.

W. B Bamford, District Freight Agent C.P.R., London, Ont., born at Belleville, Ont., Sept. 10, 1863.

W. D. Barclay, General Manager Halifax and South Western Ry., and Inverness Ry., and Coal Co., Halifax, N.S., born at Campbellton, N.B., Sept. 23, 1852.

G. T. Bell, General Passenger and Ticket Agent G.T.R., Montreal, born there Sept. 7, 1861.

W. H. Biggar, K.C., General Solicitor G.T.R., Montreal, born at the Carrying Place, near Trenton, Ont., Sept. 19, 1852.

E. R. Bremner, ex-Division Freight Agent, Ottawa Division, G.T.R., Ottawa, born in Toronto, Sept. 9, 1875.

M. H. Brown, General Freight Agent, Ontario Division, C.P.R., Toronto, born at Victoria Square, Ont., Sept. 2, 1866.

W. G. Brownlee, General Transportation Manager G.T.R., Montreal, born at Lawrenceville, Ill., Sept. 9, 1858.

J. R. Bruce, Traffic Auditor Intercolonial Ry., Moncton, N.B., born at Portsoy, Banffshire, Scotland, Sept. 23, 1848.

W. B. Bulling, Assistant Freight Traffic Manager, Eastern Lines, C.P.R., Montreal, born there Sept. 16, 1858.

R. L. Burnap, Assistant General Freight Agent G.T.R., Chicago, Ill., born Sept. 20, 1872.

C. F. Burns, Auditor of Disbursements Intercolonial Ry., Moncton, N.B., born at Clements Port, N.S., Sept. 10, 1854.

A. D. Cartwright, Secretary Board of Railway Commissioners, Ottawa, born at Kingston, Ont., Sept. 20, 1864.

W. F. Egg, ex-City Passenger Agent C.P.R., Montreal, born at Plymouth, Eng. Sept. 7, 1859.

F. A. Folger, jr., Trainmaster Canadian Northern Ry., North Battleford, Sask., born at Kingston, Ont., Sept. 17, 1865.

C. B. Foster, District Passenger Agent, C.P.R., Toronto, born at Kingston, N.B., Sept. 30, 1871.

L. A. Hamilton, ex-Land Commissioner, C.P.R., born at Penetanguishene, Ont., Sept. 30, 1852.

L. B. Howland, President and General Manager Irondale, Bancroft and Ottawa Ry., Irondale, Ont., born at Lambton Mills, Ont., Sept. 2, 1869.

G. R. Huntingdon, General Superintendent Minneapolis, St. Paul and Sault Ste. Marie Ry., Minneapolis, Minn., born Sept., 1867.

J. E. Hutcheson, Superintendent and Purchasing Agent Ottawa Electric Ry., and President Canadian Street Railway Association, born at Brockville, Ont., Sept. 15, 1858.

W. H. Kelson, ex-General Storekeeper C.P.R., now of the W. H. Kelson Co., Montreal, born at Bath, Eng., Sept. 5, 1850.

R. E. Larmour, General Freight Agent Kootenay and Boundary Districts, C.P.R., Nelson, B.C., born at Brantford, Ont., Sept. 26, 1868.

H. D. Lumsden, C.E., Chief Engineer National Transcontinental Ry., Ottawa, born at Belhaire, Scotland, Sept. 7, 1844.

J. Bruce Macdonald, Director Niagara Navigation Co., born at Glengarry, Ont., Sept. 19, 1850.

J. F. Mundle, city freight agent C.P.R., Montreal, born at Prescott, Ont., Sept. 20, 1857.

B. S. Murray, Route Agent Canadian Express Co., London, Ont., born at Glenwood, N.Y., Sept. 17, 1856.

J. Oborne, General Superintendent Ontario Division C.P.R., Toronto, born at Montreal, Sept. 19, 1861.

S. S. Oliver, Engineer of Maintenance Canadian Northern Quebec Ry., and Quebec and Lake St. John Ry., Quebec, born there Sept. 9, 1858.

S. N. Parent, Chairman National Transcontinental Ry. Commission, Ottawa, Ont., born at Quebec, Sept. 12, 1855.

E. D. Parker, Assistant General Freight Agent Minneapolis, St. Paul and Sault Ste. Marie Ry., St. Paul, Minn., born at Granville, Ohio, Sept. 20, 1839.

J. Paul, General Freight Agent Niagara, St. Catharines and Toronto Ry., born in Euphrasia tp., Grey County, Ont., Sept. 13, 1858.

R. W. Perry, C.P.R. ticket agent, Bracebridge, Ont., born at Whitby, Ont., Sept. 2, 1850.

W. D. Robb, Superintendent Motive Power G.T.R., Montreal, born at Longueuil, Que., Sept. 21, 1857.

W. H. Rosevear, ex-General Car Accountant G.T.R., Montreal, born at Wadebridge, Cornwall, Eng., Sept. 26, 1837.

A. L. Smith, Superintendent C.P.R., White River, Ont., born at Toronto, Sept. 23, 1866.

E. W. Taylor, General Freight Agent Reid Newfoundland Co., born at Carbonear, Nfld., Sept. 8, 1870.

W. Whyte, 2nd Vice-President C.P.R., Winnipeg, born at Charleston, Scotland, Sept. 15, 1843.

H. A. Young, Traffic Manager Canadian Lake Line, Toronto, born at Brooklyn, N.Y., Sept. 1, 1864.

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The directors of the East Kootenay Logging Ry. Co. announce that a call of $25.52 per share has been made upon the holders of stock. E. S. Horne, Cranbrook, B.C., is Secretary.

As a result of a big forest fire in British Columbia, which raged for days, the towns of Fernie and Michel were practically destroyed Aug. 2. The loss to the Crow's Nest Pass Coal Co., owning the Morrissey, Fernie and Michel Ry, is placed at $199,200; that of the Great Northern Ry., U.S., owning the Crow's Nest Southern Ry., is put at $500,000, and that of the C.P.R. at about $500,000.

C. P. R. Betterments, Construction, Etc.

Tobique Valley Ry.—The Dominion Parliament at the recent session voted a subsidy at the usual rate, and upon the usual conditions, for the construction of an extension of this line, operated by the C.P.R., from the present terminus at Plaster Rock to Riley's Creek, about 28 miles.

Ste. Agathe Southerly.—A subsidy at the usual rate, and upon the usual conditions, was voted last session of the Dominion Parliament for a company undertaking the construction of a line of railway from Ste. Agathe des Montes station on the C.P.R. line to Labelle and Nominingue, Que., southerly, passing near Lake St. Joseph and Ste. Mary, for a distance of 15 miles, in lieu of the subsidy voted in 1906.

Land Purchases at Montreal.—The C.P.R. is reported to have recently made large purchases of land in Tetreauville and Longue Pointe, Que., and local reports state that it is intended to erect a rolling mill for the purpose of turning out spikes, nuts, rails, etc., and to construct wharves and docks for the accommodation of vessels. Interviewed on the subject Sir T. G. Shaughnessy said the company was always on the lookout for property that could be utilized to advantage. As to its use, nothing had been decided.

Kingston and Pembroke Ry.—The subsidy voted by the Dominion Parliament in 1906, for the construction of a line of railway from Sharbot Lake or Bathurst station, or between these points, via Lanark Village, to Carleton Place, Ont., not exceeding 41 miles, was revoted at the last session of the Dominion Parliament. Surveys were made and subsidies voted for this line prior to 1900, and the latter, together with the company's powers to construct the line, have been renewed from time to time.

Ontario Division Wooden Bridges.—Following the destruction of the wooden bridge at Dumfries, on the main line between Toronto and Windsor, Ont., Aug. 3, it has been decided that all wooden bridges on the line shall be replaced as speedily as possible by concrete and steel structures.

St. Mary's and Western Ontario Ry.—The work of the final completion of the line from Embro to St. Mary's, Ont., is about completed, and the roadbed is reported to be in good shape. The negotiations with the St. Mary's Town Council with respect to the erection of a station building in the town are still in progress, but it is believed that a decision will soon be reached.

The Dominion Parliament last session voted a subsidy at the usual rate towards the construction of a line of railway from Woodstock to Exeter, Ont., not exceeding 45 miles in length.

Walkerton and Lucknow Ry.—The second section of this line from Hanover to Walkerton, Ont., 18 miles, was opened for traffic Aug. 10. The station building at Walkerton is nearly completed.

Georgian Bay and Seaboard Ry.—The first section of this line to be constructed extends from Victoria Harbor, on Georgian Bay, to Coldwater station, on the company's recently completed Toronto-Sudbury branch, about 15 miles. The line is practically completed, and is expected to be opened for traffic in October.

Winnipeg Beach Branch.—The relaying of this branch with heavy rails has been completed. The mileage between Netley and the Beach was relaid in 1907 with 72-lb. steel and this season the section from Netley to Winnipeg has been relaid with 85-lb. steel. The 56-lb. rails taken up will be utilized on some of the new branch lines.

Winnipeg Beach to Riverton.—A subsidy was granted last session of the Dominion

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General Counsel—J. C. WALSH, Esq., M.P. (of Walsh & Walsh)

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Parliament towards the construction of a line from Winnipeg Beach, northerly to Gimli, Man., not exceeding 9.50 miles, and for a line from Gimli to Riverton, Man., not exceeding 25 miles.

Track was laid on the extension to Gimli in 1906, and a train service is being operated over it.

Sheho to Lanigan, Sask.—In connection with the progress of construction on the extension of the old Manitoba and Northwestern Ry., from Sheho, to a junction with the line into Saskatoon at Lanigan, Sask., W. Whyte, Second Vice-President, said the connection would be made in the fall. No provision had been made for the construction of a branch from this line to Prince Albert, as it was not yet in the present plans of the company to construct it.

Saskatoon Westerly.—Speaking at Saskatoon, Sask., recently, W. Whyte, Second Vice-President, said the line from Saskatoon to a junction with the branch of the Calgary and Edmonton Ry., running easterly from Wetaskiwin, Alta., would be completed this year as far as Wilkie, Sask., the second divisional point west, but he did not expect it would be completed right through. He did not know whether a line would be constructed to connect the Saskatoon line with the branch of the Calgary and Edmonton Ry., running easterly from Lacombe, Alta. No provision had been made as yet for the construction of such a line.

Moose Jaw Northwesterly.—At the last session of the Dominion Parliament a subsidy upon the usual terms was voted towards the construction of a line, not exceeding 123 miles in length, from Moose Jaw, Sask., in a northwesterly direction.

In a recent interview, W. Whyte, Second Vice-President, said the line from Moose Jaw, Sask., in the direction of the Lacombe branch of the Calgary and Edmonton Ry., would be pushed on to Outlook, Sask., this season. Outlook is a point west of the South Saskatchewan River, and 123 miles from Moose Jaw.

Calgary to Lethbridge.—We are advised that the survey being made by the C.P.R. between Calgary and Lethbridge, Alta., is merely a preliminary one, for the purpose of finding out the conditions of settlement, possible grades, etc., and that the matter is not, as yet, in a sufficiently advanced stage for any definite decision to be reached in regard to it. Replying to a deputation from the Calgary, Alta., Board of Trade recently, W. Whyte, Second Vice-President, said the line from Lethbridge into Calgary would most certainly be constructed at an early date, but he could not say that it would be commenced this season. The final location would, however, be made, and preparations made for starting construction next season.

Strathcona-Edmonton Bridge.—The Dominion Parliament last session voted an amount equal to 15% upon the amount expended upon the construction and completion of a bridge over the Saskatchewan River, connecting Strathcona and Edmonton, Alta., such percentage not to exceed $100,000. The subsidy is voted to the C.P.R. as lessee of the Calgary and Edmonton Ry.

Reports are current at Edmonton that the company has abandoned its intention of constructing a bridge between Strathcona and Edmonton, and was making arrangements to secure an entrance into Edmonton over the bridge at Clover Bar, constructed for the G.T. Pacific Ry.

Belly River Bridge.—The masonry work for the bridge over the Belly River bridge, on the cut-off at Lethbridge, Alta., for the Crow's Nest branch, has been completed. Three of the steel spans have been erected, and the false work and the traveller for the erection of the other spans is being got in place. The traveller will have a length of 189 ft., with an arm 108 ft. long, and have a lifting capacity of 15 tons.

British Columbia Southern Ry.—At the last session of the Dominion Parliament a subsidy upon the usual terms and conditions was voted to aid in the construction of a railway from Carmi to Penticton, B.C., not exceeding 50 miles. Carmi is situated close to Midway, the present terminal point of the B.C. Southern Ry., and surveys have been made for its extension to Penticton.

Nicola, Kamloops and Similkameen Ry.—The railway subsidies act passed last session of the Dominion Parliament provided for a grant in aid of the construction of a line of railway from Nicola to a point at or near Penticton, B.C., not exceeding 110 miles. The N.K. and S. Ry., which is leased to the C.P.R., is already in operation from Spence's Bridge to Nicola Lake, and surveys are in progress for its extension towards Penticton, consequently it will be in a position to take advantage of the subsidy voted.

Vancouver and Lulu Island Ry.—At the last session of the Dominion Parliament, a subsidy at the usual rate was voted towards the construction of a line from Eburne, on the V. and L.I. Ry., to New Westminster, B.C., not exceeding 9.65 miles. This line is under construction, and will be equipped for the operation of trains by electricity, the company having completed arrangements for its operation by the British Columbia Electric Ry., as an extension of the portion of the line already constructed.

Esquimalt and Nanaimo Ry.—The Dominion Parliament last session voted a subsidy towards the construction of a line from a point on the existing line near French Creek Bridge, to the village of Sandwich, B.C., not exceeding 41 miles, for a line from Sandwich to Campbell River, not exceeding 38 miles, and for a line from Cowichan Bay to Cowichan Lake, not exceeding 24 miles.

Tenders are under consideration for the grading and bridging for a distance of about 11 miles, from mileage 89, near Nanoose Bay, to French Creek. (Aug., pg. 549.)

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Railways and the Supply of Cars.

The following subsections have been added to sec. 88 of the Manitoba Grain Act, relative to the supply of cars, at loading points, for the removal of grain:

3. In the case of a flag station or siding from which grain is shipped the Commissioner may in his discretion, and for such period or periods as he deems necessary, require the railway company to provide at such flag station or shipping siding a suitable person whose duties shall be: (a) to keep open for the use of shippers, at all times during the day, a car-order-book as provided under this Act, in which orders for cars may be entered in accordance with the provisions of this Act, (b) when the loading of cars is completed, to seal such car or cars; (c) to provide shippers with the regular form of grain shipping bill; and (d) when such grain shipping bill is properly filled out by the shipper, to hand it to the conductor of the train that picks up such car or cars, or place it where such conductor may get it. 4. This section shall not apply to sidings used exclusively for the passing of trains. 5. Every railway company which fails to comply with any requirement made by the Commissioner under s.s. 3 of this section, is guilty of an offence and liable, on summary conviction, to a penalty not exceeding $1,000, and not less than $500. 6. Every railway company shall supply car-order-books at all stations, flag stations and sidings where they are to be kept under this Act.

Sec. 89. An applicant may order a car or cars according to his requirements, of any of the standard sizes in use by the railway company, and in case he requires to order any special standard size of car, shall have such size stated by the station agent in the car-order-book, and the railway company shall furnish the size ordered to such applicant in his turn as soon as a car of such specified capacity can be furnished by the railway company at the point on the siding designated by the applicant in the car-order-book. In the event of the railway company furnishing a car or cars at any station, and such car or cars not being of the size required by the applicant first entitled thereto, such applicant shall not lose his priority, but shall be entitled to the first car of the size designated which can be delivered at such station at such applicant's disposal as aforesaid.

Sec. 90. The applicant or his agent duly appointed in writing shall furnish to the railway agent the name of the applicant, and the section, township and range in which the applicant resides, or such other sufficient designation of his residence for insertion in the car-order-book, and each car order shall be consecutively numbered in the car-order-book, by the railway agent, who shall fill in with ink all particulars of the application except the applicant's signature, which shall be signed by the applicant or his agent duly appointed in writing. 2. An agent of the applicant shall be a resident in the vicinity of the shipping point, and if the car order is signed by the agent of the applicant, the appointment shall be deposited with the railway agent.

The following addition is made to sec. 91: "....provided always that a car shall not be deemed to have been awarded to an applicant unless it is in a proper condition to receive grain. New sections have been added to the Act:

99a. The Commissioner shall have power in his discretion during a car shortage to direct the railroads to make an equitable distribution of empty grain cars to all stations in proportion to the amount of grain available for shipment from such stations.

99b. The Commissioner shall have power in his discretion to order cars to be supplied, contrary to the provisions of this Act, to elevators that are in danger of collapse, or in cases where the operator of any country elevator or warehouse reports in writing under oath that some portion of the grain in his elevator or warehouse is heated, and that in order to preserve the same it is necessary to ship such heated grain to the terminal elevator for treatment; provided, however, that no relief shall be granted in such last mentioned cases as long as the warehouseman has plenty of room in his building for the re-handling of such grain. 2. Upon granting relief as aforesaid the Commissioner shall submit a report of the facts thereof in each case to the Minister.

99c. Grain in carloads offered for shipment to points in Canada east of Winnipeg may be consigned "to be held at Winnipeg for orders" en route to its destination on the direct line of transit on the following conditions: 1. The shipper shall pay to the agent of the transportation company at the point of shipment the sum of $3.00 per car. 2. The shipper shall endorse upon the consignment note and shipping receipt "This car to be held at Winnipeg for orders," with the name and address of some company, firm, or person resident in Winnipeg, who will accept advice from the carrier of its arrival in Winnipeg, and who will give to the carrier instructions on behalf of the owner for its disposal. 3. 24 hrs.' free time after such advice of arrival shall be allowed the advisee in which to dispose of

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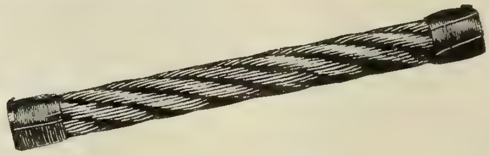

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the property. 4. If the carrier, within 24 hrs.' free time referred to in par. 3, receives written directions for delivery within its Winnipeg-St. Boniface terminals, such delivery shall be made to team tracks or industrial spurs or sidings within its own terminals upon payment of the current grain rate in effect to Winnipeg or St. Boniface at the time of shipment, and surrender of the bill of lading. 5. The carrier may, in the absence of written instructions from the advisee for the disposal of the grain within the free time mentioned in par. 3, forward the grain to its destination as consigned. 6. Grain shipped "to be held at Winnipeg for orders" delivered in Winnipeg or St. Boniface, as provided for in par. 4, may be sent forward to any point in Canada east of Winnipeg within 6 months of its receipt at Winnipeg or St. Boniface at the balance of the through rate from the initial point to destination, as provided in the carrier's authorized tariff in force on the date of the initial shipment, plus 1c. per 100 lbs. terminal charges, less the $3.00 per car mentioned in par. 1. 7. The detention of grain at Winnipeg-St. Boniface, under this section, shall not affect the application of the provisions of The Inspection and Sale Act with respect to such grain. 8. In case of the congestion of traffic caused by the operation of this section, the Board of Railway Commissioners may make an order suspending the operation of this section for the period mentioned in such order. 9. The provisions of this section shall have effect only from Dec. 15 in any year to Sept. 1 in the following year.

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Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

	Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July..	$1,024,300	$ 662,300	$ 362,000	$420,500+
Aug..	835,600	619,200	216,400	240,700+
Sept..	758,300	549,200	209,100	133,900+
Oct...	931,200	621,300	309.900	116,100+
Nov..	957,400	689,100	268,300	215,700+
Dec..	801,100	558,400	242,700	264,900+
Jan...	578,200	462,500	115,700	226,800+
Feb..	485,600	401,900	83,700	152,400+
Mar.	625,300	453,400	171,900	136,500+
April	686,100	525,400	160,700	116.200+
May.	654,900	523,100	131,800	215,700−
June.	674,400	462,600	211,800	288,700−
	$9,012,400	$6,528,400	$2,484,000	$1,519,300+

Approximate earnings for July, $728,500, against $939,500 for July, 1907.

Mileage operated, 2,874, against 2,554 in 1907.

◆

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	$7,008,274.46	$4,501,421.80	$2,506,852.66	$135,041.58+
Aug.	7,010,177.40	4,439,902.25	2.570,275.15	107,695.95+
Sept.	6,423,452.68	4,272,099.33	2,151,353.35	286,578.28−
Oct..	7,071,047.59	4,390,729.95	2,680,317.64	104,509.87−
Nov.	6,953,967.56	4,508,933.35	2,445,034.21	181,911.27+
Dec.	6,418,576.38	4,341,386.80	2,077,189.58	188,404.76−
Jan..	4,498,560.80	3,874,569.02	623,991.78	75,664.17+
Feb..	4,129,044.09	3,771,947.48	357,096.61	264,891.51−
Mar.	5,424,931.26	4,123,901.77	1,301,029.49	944,706.73−
April	5,497,736.30	3.775,501.86	1,722,234.44	644,691.43−
May.	5,392,570.16	3,711,074.92	1,681,495.24	827,862.77−
June.	5,555,835.04	3,880,339.17	1,675,495.87	739,610.41−
	$71,384,173.72	$49,591,807.70	$21,792,366.02	$3,510,942.79−

Approximate earnings for July, $6,196,000, against $6,900,000 for July, 1907.

Mileage operated, 9,521.

The net results of the Company's operations for the year ended June 30, are as follows:

Gross earnings		$71,384,173.72
Working expenses		49,591,807.70
Net earnings		$21,792,366.02
Net earnings of steamships in excess of amounts included in monthly reports		1,112,759.24
Income from other sources		1,541,874.03
Total net income		$24.446,999.29
Deduct fixed charges		8,770.076.71
		$15,676,922.58
Amount transferred to Steamship Replacement Fund	$800,000	
Contribution to Pension Fund	80,000	880,000.00
Net revenue available for dividends		$14,796,922.58

After the payment of all dividends declared for the year, there is a surplus of $5,579,715.48 to be carried forward.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross revenue for June, $211,753.53; operating expenses, $163,906.37; net revenue, $47,847.16; against $313,011.62 gross revenue; $214,586.65 operating expenses; $98,424.97 net revenue for June, 1907. Gross revenue for 12 months ended June 30, $3,017,363.60; operating expenses, $2,206,214.69; net revenue, $811,148.91; interest on bonds, taxes, etc., $1,167,810.09; deficit, $356,661.18; against, $3,294,833.17 gross revenue; $3,214,847.17 operating expenses; $79,986.00 net revenue; $1,135,521.95 interest on bonds, taxes, etc., $55,535.95 deficit for same period 1906-07. Approximate earnings for July, $230,932, against $329,995 for July, 1907.

MINERAL RANGE RD.—Gross revenue for June, $70,134.87; operating expenses, $59,583.84; net revenue, $10,551.03; against $67,643.70 gross revenue; $50,121.05 operating expenses; $17,522.65 net revenue for June, 1907. Gross revenue for 12 months ended June 30, $810,393.98, operating expenses, $688,864.98; net revenue, $121,529.00; interest on bonds, taxes, etc., $151,090.65; deficit, $29,561.65; against $787,915.51 gross revenue; $586,447.45 operating expenses; $201,468.06 net revenue; $157,363.43 interest on bonds, taxes, etc.; $44,104.63 surplus for same period 1906-07. Approximate earnings for July, $71,199, against $72,259 for July, 1907.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross revenue for June, $920,752.83; operating expenses, $543,690.35; net revenue, $377,062.48; against $1,159,790.34 gross revenue; $719,015.65 operating expenses; $440,774.69 net revenue for June, 1907. Gross revenue for 12 months ended June 30, $11,509,857.32; operating expenses, $7,115,964.91; net revenue, $4,393,892.41; against $12,892,079.03 gross revenue; $7,433,548.79 operating expenses; $5,458,530.24 net revenue for same period 1906-07. Approximate earnings for July, $927,145, against $1,102,152 for July, 1907.

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Grand Trunk Ry. Earnings, Expenses, etc.

Subject to audit, the accounts for the half-year ended June 30 show the following results:

Gross receipts		£2,919,200
Working expenses		2,137,300
Net receipts		£ 781,900
Net revenue charges for the half-year less credits		485,900
Balance		£ 296,000
Deduct Canada Atlantic Ry. deficiency for the half-year	£68,900	
Deduct Detroit, Grand Haven and Milwaukee Ry. deficiency for the half-year	46,600	115,500
Surplus		£180,500

This surplus of £180,500 added to the balance of £6,700 from Dec., 1907, makes a total of £187,200 available for dividend, which will admit of the payment of the full dividend for the half-year on the 4% guaranteed stock, leaving a balance of about £1,600 to be carried forward. The accounts of the G.T. Western Ry. for the year ended June 30 show a surplus sufficient to provide for the interest on the first mortgage bonds, and leave a balance of about £13,100.

Approximate earnings for July, $3,320,114, against $3,950,937 for July, 1907.

◆

Report on Car Efficiency.—The committee on car efficiency of the American Railway Association has issued its report on car surpluses and shortages to Aug. 5. The total of surplus cars for the date of the report is 281,621, a decrease of 27,059 since the previous report. Of this decrease 6,505 are box cars, 21,195 coal and gondola cars, while surplus flat cars increased about a thousand. Shop reports indicate an increase of about 5,000 in the number of bad order cars, leaving a net improvement of 22,000 cars. The figures for group 11, which covers Canadian lines, show six lines reporting with the following surpluses: 6,683 box cars, 711 flat cars, 463 coal, gondola and hopper cars, and 1,646 other cars, a total of 9,503 cars, against a surplus of 10,530 cars July 22. There were no shortages reported on the Canadian lines since June 24.

The number of the employes of the Intercolonial Ry. pensioned under the provisions of the Provident Fund is 162, and of the employes of the Prince Edward Island Ry., 12. Since Jan. 1, applications for pensions have been received from 45 employes of the railways.

The Canadian Northern Ontario Ry. has issued its standard passenger tariff C.N.O. no. 14, C.R.C. no. 26, cancelling C.N.O. no. 1, C.R.C. no. 1. The tariff affects the company's line between Toronto, Sudbury, and Moose Mountain, the rate being 3c. a mile. The company has also issued its standard freight mileage tariff, C.N.O. no. 44, C.R.C. no. 74, cancelling C.N.O. no. 1, C.R.C. no. 1.

Railway Finance, Meetings, etc.

Alberta Ry. and Irrigation Co.—Gross railway earnings for 12 months ended June 30, $223,966, against $190,335, for the same period 1906–07.

Algoma Central and Hudson Bay Ry.—The press reports recently circulated that the C.P.R. would acquire the A.C. and H.B. Ry., as the result of some dealings with the securities of the Lake Superior Corporation, which owns the line, have been officially denied. Later reports state that the steel plant will be acquired by the United States Steel Trust, and that the railway will go to Mackenzie, Mann & Co., for incorporation with the Canadian Northern Ry. system.

Atlantic and Lake Superior Ry.—Baie des Chaleurs Ry.—A meeting of holders of certificates of participation in the Atlantic and Lake Superior Ry. participation fund was held in London, Eng., July 30, for the purpose of authorizing the acquisition of shares in the Baie des Chaleurs Ry. and the A. and L.S. Ry., in exchange for certificates of participation, and for the purpose of authorizing the Royal Trust Co., as trustee for the certificates of participation, to tender for the purchase of the railways, which have been ordered to be sold by the Exchequer Court of Canada.

Canadian Northern Ontario Ry.—A mortgage dated June 24, made by the C.N.O. Ry. to the National Trust Co., Toronto, and the British Empire Trust Co., London, Eng., securing an issue of 3½% debenture stock to the amount of £1,615,068, 9s. 7d., upon the company's line between Toronto and Sudbury, has been deposited with the Secretary of State, Ottawa.

Canadian Pacific Ry.—Dividends at the rate of 2% on preferred stock and of 3% on the common stock have been declared for the half-year ended June 30. An additional payment of one-half of 1% on the common stock will be paid at the same time out of interest on the proceeds of land sales.

Dominion Atlantic Ry.—Gross earnings for June, $104,700, against $95,135 for June, 1907. Total earnings for 6 months ended June 30, $468,700, against $457,761 for same period 1907.

Grand Trunk Ry.—The directors, out of the profits for the half-year ended June 30, have decided to pay the dividends upon the guaranteed stocks only. The paid-up capital of the G.T.R. consists of five classes, ordinary, guaranteed, and first, second, and third preferred. There is £22,475,985 ordinary, £8,736,427 guaranteed, £3,420,000 first preferred, £2,530,000 second preferred, £7,168,055, third preferred, a total paid-up capital of £44,330,467. Dividends have never been paid on the ordinary stock. From 1894 to 1897, nothing was paid on the 4% guaranteed stock, but since 1898 the full 4% has been paid. In 1898 3% was paid on the first preferred, and the full dividends of 5% were paid 1899 to 1906 inclusive, the dividend periods being March and Sept. The Sept., 1904, dividend was passed, but 5% was paid on the first preferred in April, 1905, and 2½% in Oct., 1905. In 1906 and 1905 5% was paid. A dividend of 3¼% on the second preferred stock was paid in the year 1899, being the first in many years. In 1900 3% was paid, in 1901 4%, and in 1902 and 1903 5%. The semi-annual dividend of 2½% on the second preferred was paid Mar. 23, 1904, but the Sept. payment was omitted. In April, 1905, 5% was paid on the 2nd preferred and 2½% in Oct., 1905, which has since been the regular semi-annual rate to Oct., 1907, inclusive. On the third preferred stock 1% was paid in 1902, and 2% in 1903. A semi-annual dividend of 2% was paid Mar. 23, 1904, and the same on April 30, 1906. In April, 1907, 3% was paid.

Intercolonial Ry.—The earnings of the Intercolonial Ry. for April amounted to

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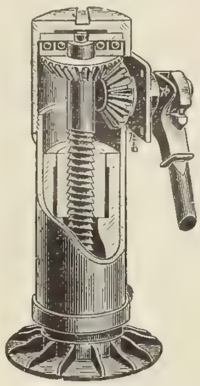
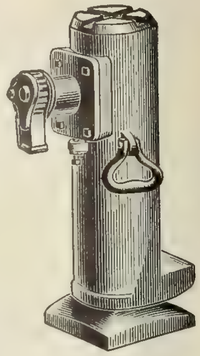
ARE MADE IN CANADA AND SAVE YOU DELAY AND DUTY ON AMERICAN MADE JACKS.

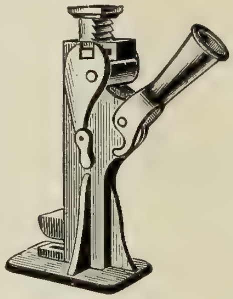
50 Styles 8 to 70 Tons Capacity
Carried in stock for IMMEDIATE DELIVERY



Sectional View

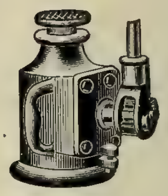


Foot Lift Jack



15 Ton Track Jack

Traversing Jack



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BLACKSTONE OIL ENGINES

— ARE —

- Clean
- Simple
- Reliable
- Economical
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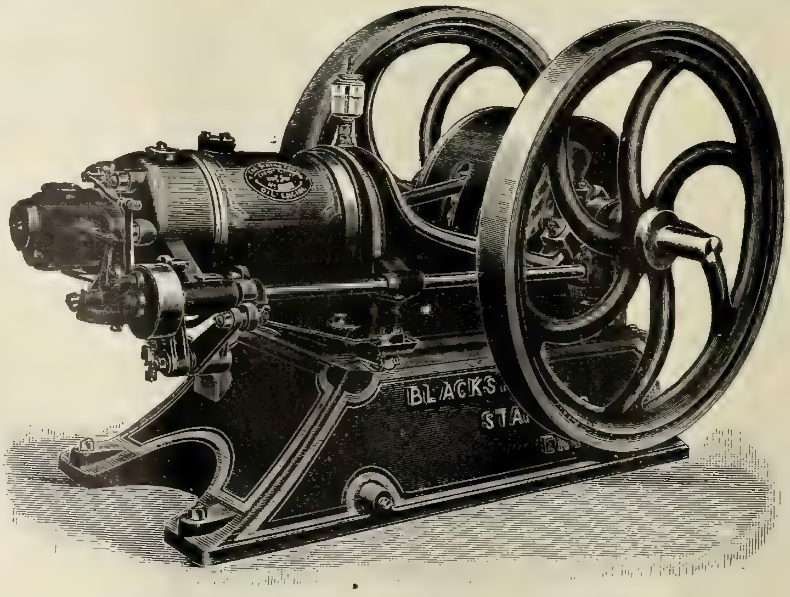
- Well-made

— HAVE NO —

- Fans
- Sparks
- Bad Odor
- Electric Battery
- Exterior Flame when operating



Blackstone Engine with Oil Tank in Base

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS, TORONTO, ONT.

DISTRICT OFFICES: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

$740,576.43, and for May to $689,736.62, against $817,952.34 for April, and $799,095.95 for May, 1907. The working expenses for April were $740,851.01, against $669,380.90 in April, 1907; and for May, $781,086.18, against $715,888.88 for May, 1907.

New Brunswick and Prince Edward Island Ry.—The report for the year shows net operating earnings of $1,427.74. The annual meeting was held at Sackville, N.B., Aug. 4. Following are officers and directors for the current year: President, Hon. J. Wood; General Manager and Treasurer, F. C. Harris; Secretary, H. C. Read; other directors: F. B. Black, W. Ogden, W. Milner, and H. Wood.

Quebec and Lake St. John Ry.—Gross receipts for April, $147,988, against $164,627 for April, 1907. Total earnings for 4 months ended April 30, $324,312, against $351,413 for same period 1907.

St. Mary's and Western Ontario Ry.—At the annual meeting of the shareholders of this company called for Sept. 1, a resolution is being submitted reducing the number of directors from eight to five. The company's railway as at present constructed extends from Embro to St. Mary's, and is being operated under lease by the C.P.R.

Toronto, Hamilton and Buffalo Ry.—Gross earnings for June, $61,436, against $75,322 for June, 1907. Total earnings for 12 months ended June 30, $853,891, against $853,985 for same period 1906-07.

Vancouver, Victoria and Eastern Ry and Navigation Co.—See Vancouver, Westminster and Yukon Ry.

Vancouver, Westminster and Yukon Ry.—The property held by J. Hendry and his associates in Vancouver and New Westminster, together with the railway constructed between Vancouver and New Westminster B.C., under the charter of the V. W. and Y. Ry., was formally transferred to the Vancouver, Victoria and Eastern Ry., and Navigation Co., the British Columbia connection of the Great Northern Ry., U.S., July 29. The property transferred, which is valued at $2,500,000, includes all the trackage and foreshore south of False Creek, and east of the Westminster Ave. bridge, and all the foreshore at the east end of the creek running as far back as the point intersected by Boundary Ave. on the north and Glen Drive on the south, in Vancouver. This foreshore is owned subject to an agreement with the city that the railway company shall commence construction within a year upon a spur line to Burrard Inlet. The property also includes about 2,000 ft. of waterfront on the south shore of Burrard Inlet.

The V.W. and Y. Ry. Co. retains possession of its charter rights to construct a railway from Vancouver to the Yukon Territory, for which surveys have been made.

White Pass and Yukon Ry.—Gross earnings for June, $194,120. Total earnings for 12 months ended June 30, $1,551,709.

A Railway to Hudson Bay.

The organization of the engineering parties to make a survey of a route to Hudson Bay, which the Department of Railways was authorized to make at the last session of the Dominion Parliament, was definitely undertaken Aug. 14, on the arrival at Winnipeg, Man., of —. Murphy and —. Law, two of the Government engineers, who will be the principal assistants to Jno. Armstrong, the Chief Engineer. Four parties have been organized, two of which will make a survey of the route between Pas Mission, Sask., the present terminus of the Canadian Northern Ry. line reaching out for the Bay, and Fort Churchill, and the other two will work from Lake Winnipeg, along the valley of the Nelson River to Port Nelson. The work is to be prosecuted from both ends of each route, so that one party will go right through to the Bay before starting the actual survey. At Fort Churchill and at Port Nelson a careful examination will be made of the harbor facilities, and of the probable cost of the wharves, docks, aids to navigation, etc., which will have to be constructed for the accommodation of the steamships which it is hoped to attract to the new port. Before the reports of these survey parties the Government will decide which of the two routes is the more advantageous, prior to asking Parliament to sanction the construction of the line. The parties expect to have the work completed in about six months.

In an interview at Winnipeg, Aug. 12, D. D. Mann, Vice-President Canadian Northern Ry., said: "The Dominion Government will either have to subsidize the road to Hudson's Bay very heavily or build it themselves, on account of the uncertainty of navigation in the Bay, and the uncertainty of the road being a paying investment. In my judgment the Hudson's Bay railway will pay handsomely and will be a great commercial success. The financial people of the world will not take chances on a scheme like the Hudson's Bay railway. Like the man from Missouri, they say, 'Show me.' If they are shown that the road will be a success, then they will be ready to invest in it. The great advantage of the road to the Bay will be to the new country around the southern part of it, and it will also furnish a splendid route for sending out the cattle of the west. The first 150 miles of the country north of the Pas is fairly good, but the balance of the way to the Bay is poor. Whoever operates that road must have a system to feed it. The Hudson's Bay road will never be a success if operated either by an independent company or by the Government. In that case the road would only get the surplus wheat which would be handed over to them by other railways."

Canadian vs. U.S. Eastbound Rates.

A circular letter signed by shipowners trading from U.S. ports has been sent to the Trunk Line Association, representing the railroads engaged in moving grain east of Buffalo and Erie, as a consequence of its refusal to grant reductions in freight rates to enable them to export grain from U.S. ports, and to compete with the Canadian all water route to Montreal. The letter is as follows:

"The undersigned steamship companies operating vessels from New York, Boston, Philadelphia and Baltimore wish to again call the attention of the railroad companies to the unreasonable rates demanded by them on export grain from lake ports to the seaboard as compared with the rates that are being accepted by the railroad companies from the lake ports to Montreal. The present basis of the 'at and east' rate from Buffalo to New York and Boston is now 5½c., excluding elevation, against the rate from Georgian Bay points to Montreal of 3½c., including elevation, as the result of reductions made by the railroads to Montreal since the joint export grain agreement, and it is largely on account of this reduction that the port of Montreal has benefited tremendously in the movement of grain, whereas the American ports have handled practically no grain during the corresponding period. The present situation is a deplorable one, for which you are responsible, and is killing the steamship business from the four ports named, as we cannot expect any grain until Montreal has been fully supplied. Steamers have been withdrawn from all the ports named on account of their not being able to get cargoes, while Montreal is not only loading all the regular tonnage, but the favorable grain rates to that port are attracting tramp steamers in addition to the regular lines. We again appeal to the railroad companies to adjust the situation and reduce their 'at and east' grain rate to a reasonable basis in order to partly meet the above competition, and we will take care of the balance."

A statement of the grain received and exported, for the week ended July 25, from U.S. ports and Montreal, shows that the amount exported from Montreal exceeds the combined exports of all the U.S. ports:

	Receipts bush.	Exports bush.
Baltimore	575,078	441,200
Boston	30,772	......
Galveston	52,000	......
New Orleans	12,000	......
New York	933,500	400,500
Philadelphia	426,859	254,753
	2,030,209	1,096,453
Montreal	973,816	1,260,693

Warnings to Advertisers.

From Industrial Canada, Toronto.

Extract from report of committee of Canadian Manufacturers' Association: "Attention has been directed to a publication known as the 'Official Guide of the I.C.R.,' issued under authority from the Minister of Railways and Canals. This book contains a great deal of advertising, and upon investigation your committee is informed that it has been secured practically under false pretences. The book is issued entirely as a private enterprise, and the giving or withholding of advertising will neither hurt nor help any one who has business to transact with the I.C.R. or the Department of Railways and Canals. A letter has been obtained from the Minister to this effect, and it is now proposed to send a copy of same in confidence to all members of the Association who carried advertising in the last issue of the Guide."

From Canadian Machinery, Toronto.

"This is the time of the year when many annual publications are being gotten out nominally in the interests of transportation companies and other big concerns. They are usually called an 'Official Guide,' and claim to be issued under the authority of the president or general manager. The canvassers approach firms who supply or want to supply these corporations with products of one kind or another, and they hint that it is very much in the interests of the firm that they should advertise in this Guide, otherwise, they hint it may affect their business with the corporation. A couple of years ago, a letter was carried by one of these canvassers alleged to be signed by President Hays, of the Grand Trunk Ry., which was proved to be a forgery. There is another official guide now being prepared in the interests of one of the big railways, and claimed to be issued under the authority of the head of the road. A letter has been received from him which states distinctly that his corporation has nothing whatever to do with the publication. The book is issued entirely as a private enterprise, and the giving or withholding of an advertisement will neither help nor hurt any one who has business to transact with the corporation. When business men are approached by canvassers from publications of this sort, which they believe to be a fake, and most of them are, they should positively refuse to place any business, and should write at once to the head of the corporation and get his assurance that the statements made by the canvassers are correct. Certain big firms have been doing this, and in few, if any, cases, have they found the statements verified."

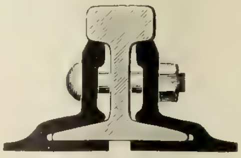
Editor's Note—C. M. Hays is Second Vice-President and General Manager, not President, as stated by our contemporary.

ADDITIONAL SAFETY AND ECONOMY IN

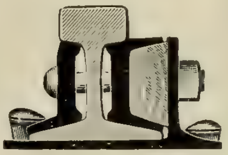
TRACK MAINTENANCE

has been proved by the use of Continuous, Weber and Wolhaupter base-supported rail joints—after ten (10) years' service, having a record of over **25,000 miles in use**—the extent of which is evidence of their excellence.

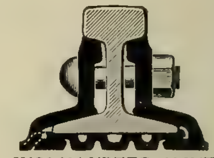
HIGHEST AWARDS
Paris, 1900;
Buffalo, 1901; St. Louis, 1904


CONTINUOUS JOINT

Over 25,000 miles in use


WEBER JOINT

Rolled from Best Quality Steel


WOLHAUPTER JOINT

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Baltimore, Md. Boston, Mass. Chicago, Ill. Denver, Colo. Pittsburg, Pa.
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London, Eng. New York City.

THE RAIL JOINT COMPANY OF CANADA, LIMITED

OFFICES: BOARD OF TRADE BLDG., MONTREAL, CAN.

Makers of Rail Joints for Standard and Special Rail Sections, also Girder, Step or Compromise, and Insulating Rail Joints, protected by Patents in U.S., Canada and Mexico.

Pintsch Light Steam Heat

Car lighting by the Pintsch System with improved mantle lamps and by Vapor lighting system for branch lines. Gas broilers, and ranges. Buoys.

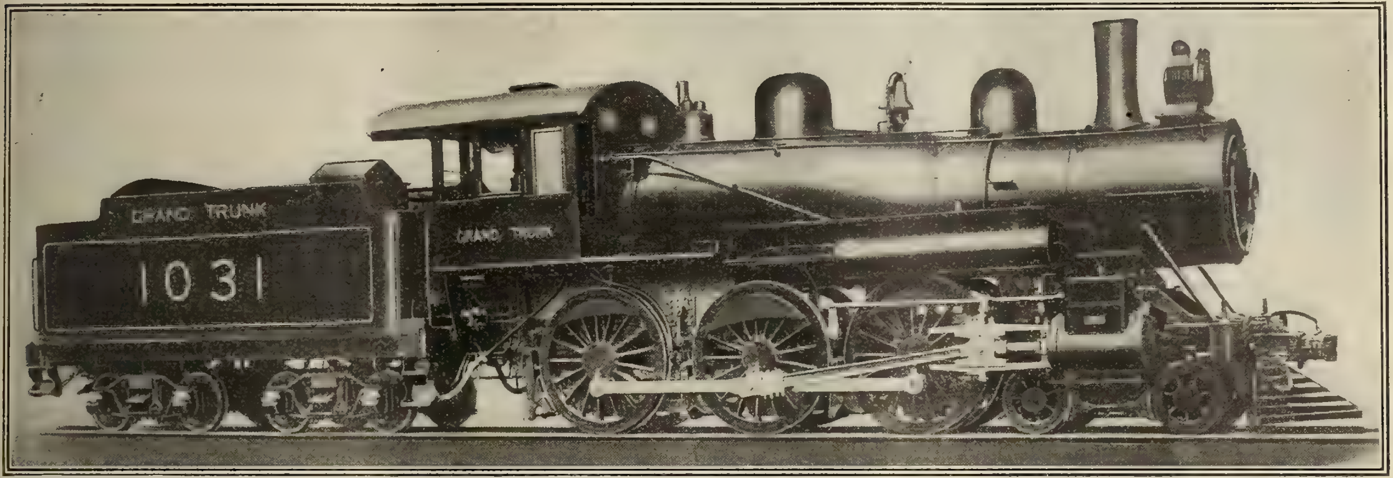
The Safety Car Heating and Lighting Co
2 RECTOR ST., NEW YORK.

Car heating by controllable direct steam and water circulating systems steam tight couplers, traps, train pipe valves and other appliances.

CHICAGO - BOSTON - ST. LOUIS - ATLANTA - PHILADELPHIA - MONTREAL - BERKELEY, CAL.

Ten-Wheeled Locomotives for the G.T.R.

The G.T.R. has received recently from the Baldwin Locomotive Works ten 10-wheeled locomotives, which are classed by the railway company as A 3. As the driving wheels are 73 ins. in diameter, they are particularly suitable for passenger service. The tractive force exerted by this design is 22,950 lbs. Although no unusual features enter into the construction of these locomotives, they are interesting as strictly modern examples of a type that has given admirable results in service. The cylinders are single expansion, double bolted in the vertical flanges to provide strength against breakage. They are equipped with balanced slide valves, which are driven by the Stephenson valve motion. The guides are of the alligator type, of hammered iron, and the crossheads are of cast steel with cast iron shoes, having tinned bearing surfaces. The connecting rods are of forged steel, the main rods being of I-section, while the coupling rods are rectangular in section. Cast steel is used for the main driving-wheel centres, while the front and back driving wheels have cast iron centres. All tires are secured by retaining rings. The rock shafts are placed between the first and second pairs of driving wheels, and are directly connected to the link blocks. With this arrangement, the use of transmission bars is avoided.



TEN-WHEELED LOCOMOTIVE BUILT FOR THE G. T. R. BY THE BALDWIN LOCOMOTIVE WORKS.

The main frames are of cast steel, provided with double front rails, which are bolted and keyed in place. The brake hanger bosses are cast in one piece with the frames. All the driving springs are underhung, and the driving equalization is continuous on each side of the locomotive. The upper frame rails are inclined between the second and third pairs of driving wheels, in order to give more room for a sufficiently deep firebox.

The boiler is of the radial stay wagon top type, with a narrow firebox, which is placed above the frames. The barrel is built up of three rings, the middle ring being tapered. The longitudinal seams on the first and second rings are butt jointed and sextuple riveted. The dome is placed on the third ring, which has a welded seam on the top centre line with a reinforcing liner inside.

The firebox is carried by sliding supports at the front and back, and an expansion link on each side. The grate slopes toward the front and the depth from the top of the grate to the bottom of the lowest tube is 26 ins. Three rows of expansion links support the front end of the crown. The fire door opening is formed by flanging both sheets outward, and uniting them with a sleeve. A brick arch is provided, and it is supported on three water tubes each 3 ins. in diameter.

The tender frame is built of 10 in. steel channels. The trucks are of the arch bar type, with triple elliptic springs. The engine and tender truck wheels are steel tired with cast iron centres, and were supplied by the Standard Steel Works Co.

The principal dimensions of this locomotive are given in the following table. The accompanying illustration shows the general features of the design:

Cylinder	19″ x 26″
Valve	Balanced.
Boiler, type	Wagon top.
“ material	Steel.
“ diameter	60¼″
“ thickness of sheets	⅝″, 11/16″, ¾″
“ working pressure	210 lbs.
“ fuel	Soft coal.
“ staying	Radial.
Firebox, material	Steel.
“ length	108⅛″
“ width	40¾″
“ depth, front	72″
“ depth, back	60″
“ thickness of sheets, sides	⅜″
“ “ “ “ back	⅜″
Firebox, thickness of sheets, crown	7/16″
“ “ “ “ tube	½″
Water space, front	4″
“ “ sides	3½″
“ “ back	3½″
Tubes, material	Steel.
“ thickness	125″
“ number	270
“ diameter	2″
“ length	13′ 6″
Heating surface, firebox	162 sq. ′
“ “ tubes	1,893 sq. ′
“ “ firebrick tubes	19 sq. ′
“ “ total	2,074 sq. ′
“ “ grate area	30.5 sq. ′
Driving wheels, outside diameter	73″
“ “ inside diameter	66″
“ “ journals, main	9″ x 10″
“ “ journals, others	9″ x 10″
Engine truck wheels, front diameter	31″
“ “ “ journals	6½″ x 10½″
Wheel base, driving	14′ 0″
“ “ rigid	14′ 0″
“ “ total engine	24′ 4″
“ “ total engine and tender	52′ 0″
Weight, on driving wheels, estimated	126,000 lbs.
“ on truck, front, estimated	42,000 lbs.
“ total engine, estimated	168,000 lbs.
“ total engine and tender, about	288,000 lbs.
Tender, wheels	No. 8
“ wheels, diameter	34″
“ journals	5½″ x 10″
“ tank capacity, water	6,000 gals.
“ tank capacity, coal	10 tons.

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The Ontario Railway Signal Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $40,000 and office at Toronto, to acquire, hold and dispose of inventions for signalling and stopping railway trains; to manufacture and sell trucks, cars, etc., and all machinery for the use of power of all kinds. The provisional directors are: G. Russell, E. M. Lindsay and V. Waldock, Toronto.

G.T.R. Betterments, Construction, Etc.

Ottawa Union Station.—The work of excavating for the foundations for the new union station at Ottawa will be proceeded with as soon as the site has been transferred to the company by the Government. W. Wainwright, Fourth Vice-President, stated Aug. 11 that he expected the foundations for both station and hotel would be completed before the winter. The architects were busy completing the detailed drawings, and all other arrangements were being completed for pushing ahead with the work.

Toronto Union Station.—The Toronto Board of Control has extended the time for the commencement of construction upon the new union station by the G.T.R. for a further period of three months from Aug. 22.

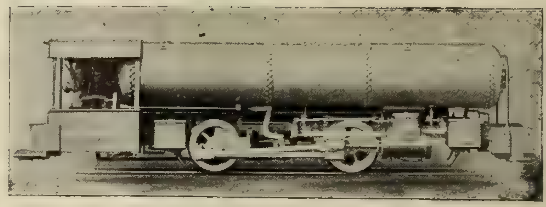
Buffalo and Lake Huron Ry.—The work of relaying the track on this line with 80-lb. steel is being carried out by the G.T.R., which operates it under lease. The section on which work is being carried on at present is from near Bright, to near Holmesville, Ont., a distance of 47 miles.

Stratford Shops.—The steel work on the new shops at Stratford, Ont., has been completed, and the old brick buildings, which for years did duty, have been demolished. The concrete and other work of erection is being pushed ahead.

London, Ont., Improvements.—The Mayor of London, Ont., in discussing the question of the G.T.R. improvements at that city recently said: "Mr. Hays told me that it would cost the city of London at least $200,000 for the privileges the company would have given for nothing had the offer of the company been accepted two years ago. I had several chats with him, and he felt very confident that if the city took the matter to the Railway Commission they would receive infinitely better terms than were offered the city some time ago. He said that he would not oppose the city taking the matter to the Commission, as he felt confident that his company would be given better treatment than through direct negotiations. He pointed out that the Commission assessed the municipalities for benefits received, and the corporations must abide by the decision of the Board. I also had a talk with Mr. Fitzhugh in Quebec, who seemed more favorable than Mr. Hays. There is no doubt that the question is a live one with the company, but it will be some time before anything is done. The matter will be brought up before the G. T. R. officials shortly, and then something will be done."

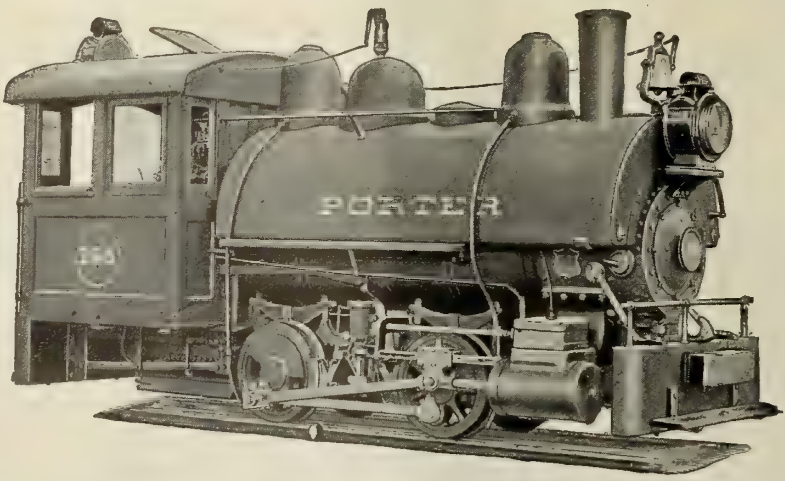
LIGHT
LOCOMOTIVES

STEAM AND COMPRESSED AIR



COMPRESSED AIR LOCOMOTIVE

H. K. PORTER COMPANY
643 Wood Street, - Pittsburg, Penna.



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ALL GAUGES. EVERY VARIETY OF DESIGN. FOR ALL PURPOSES.

CONTRACTORS' LOCOMOTIVES ON HAND AND UNDER WAY FOR QUICK COMPLETION. WIDE AND NARROW GAUGE.

LOGGING, MINE AND INDUSTRIAL LOCOMOTIVES.

"TENTH EDITION CATALOGUE JUST PRINTED, MAILED FREE TO MINE, RAILWAY OR INDUSTRIAL OFFICIALS; OR TO OTHERS ON RECEIPT OF FIFTY CENTS."

MONTREAL STEEL WORKS, LIMITED

POINT ST. CHARLES, - - MONTREAL, CANADA

MANUFACTURERS OF

STEEL CASTINGS
(Acid Open Hearth System)

SWITCHES and TRACK WORK
for Steam and Electric Roads

SPRINGS
of all kinds

MANGANESE STEEL CASTINGS
for wearing Parts, insuring Great Hardness and Durability

INTERLOCKING PLANTS

TRUCKS FOR ELECTRIC CARS

Agents for Canada for

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"Speedicut" High Speed Steel, Tool Steel, Axe Steel, Saw Steel, Files, etc. A large stock carried in our warehouse.

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Quotations for Tee Rails, Fish Plates, etc., promptly furnished. Catalogues sent on application.

Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

5042. July 21.—Authorizing Bell Telephone Co. to erect wires across C N.Q.R. at St. Charles Borromee St., Joliette, Que.

5043 5044. July 21.—Authorizing Oro Telephone Co. to erect wires across G.T.R. at two points in Oro tp., Ont.

5045. July 21.—Authorizing J., F. & M. Contant, L'Epiphanie parish, and A. A. Granger, of Montreal, to carry a highway across C.P.R. in parish L'Epiphanie, Que.

5046. July 21.—Authorizing Temiscouata Ry. to construct bridge at mileage 5 over public road at Green River, Que.

5047. July 21.—Authorizing C.P.R. to construct additional track on lane in block 67, Calgary, Alta.

5048. July 21.—Authorizing C.P.R. to open for traffic portion of its double track from Garwood to Kenora, mileage 140.5 to 145.5, from Ignace, Ont.; from Vermilion to Gilbert, mileage 89.8 to 97.9, from Ignace, Ont.; and from Buda to Dexter, mileage 40.4 to 54.0 from Fort William, Ont.

5049. July 21.—Authorizing Town of Palmerston, Ont., to lay water mains under G.T.R.

5050. July 22.—Authorizing Temiscouata Ry. to construct bridge at mileage 60 over Pole River, Que.

5051. July 22.—Authorizing Temiscouata Ry. to construct bridge at mileage 5, over Green River, Que.

5052. July 22.—Authorizing J. H. Wilcox to lay gas pipe under G.T.R. at Onondaga station, Ont.

5053. July 21.—Authorizing McKillop, Logan & Hibbert Telephone Co. to erect telephone wires across G.T.R. at Main St., Dublin, Ont.

5054. July 21.—Authorizing Welland County Telephone Co. to place wires under M.C.Rd. at public crossing between lots 10 and 11, Bertie tp., Ont.

5055, 5056. July 21.—Authorizing J. L. Benn, Long Lake, Ont., to erect telephone wires across K. &. P. R. at Tyrons' crossing, near Sharbot Lake, and at Hinchinbrooke, Ont.

5057. July 22.—Authorizing C.P.R. to make change in the line of its Bulyea branch, near Bulyea, Sask.

5058. July 21.—Authorizing Welland Co. Telephone Co. to erect wires under M.C. Rd. at Black Creek, Ont.

5059-5061. July 21.—Authorizing J. L. Benn, of Long Lake, Ont., to erect telephone wires across K. & P. Ry. ¼ mile north of Godfrey station, 1 mile north of Verona, and at Sharbot Lake station, Ont.

5062. July 21.—Authorizing Hamilton Cataract, Power, Light and Traction Co. to erect electric transmission lines across G.T.R. to Berlin Machine and Tool Co. Works, Ltd., Barton tp., Ont.

5063-5066. July 21.—Authorizing G.T.P.R. to construct bridges east of Portage la Prairie, Man., west of Portage la Prairie, over the North Saskatchewan River, and over the South Saskatchewan River, near Saskatoon, Sask.

5067. July 22.—Authorizing C.P.R. to change the line of its Regina, Saskatoon and North Saskatchewan branch.

5068. July 22.—Authorizing Bell Tel. Co. to erect wires across the P.M. Rd. at public crossing ¾ mile south of Oldcastle station, Ont.

5069. July 22.—Authorizing location of C.P.R. station at Rapide de l'Orignal, Que.

5070. July 22.—Authorizing C.P.R. to open for traffic that portion of the second track of its Smith's Falls section between St. Anne's and Vaudreuil, Que., 3.96 miles, and from Kemptville Jct. to Smith's Falls, Ont.

5071–5077. July 23.—Authorizing C.P.R. to reconstruct following bridges: 117.68 White River section, 40.8 Newport section, 24.56 Chapleau section, 31.2 Emory Creek, Cascade section, 55.86 Chapleau section, 51.54 Nipigon section, and 15.6, Yamaska River, Newport section.

5078. July 23.—Authorizing Central Telephone Association to erect wires across C.P.R. at three different points in Ont.

5079. June 17.—Ordering G.T.R. to agree on joint freight tariffs with O. and N.Y.R. between stations on the O. and N.Y.R. and the G.T.R. This order is given in full on page 639.

5080. July 24.—Rescinding order of July 15, 1908, granting leave to N.B. Telephone Co. to erect wires across C.P.R. near McAdam Jct., N.B.

5081. July 24.—Authorizing Bell Telephone Co. to erect wires across C.N.O.R. at public crossing 1¼ miles n.w. of James Bay Jct., Ont.

5082. July 21.—Authorizing T. M. McFadden, Pickering, Ont., to erect telephone wire across G.T.R. at Rosebank, Ont.

5083. July 24.—Authorizing New Brunswick Telephone Co. to erect aerial wires across C.P.R. tracks between stations, Edmundston, N.B.

5084. July 24.—Authorizing Temiscouata Ry. to construct a deck plate girder span, structure no. 10, at mileage 21¾, where its railway crosses highway in the province of Quebec.

5085. July 24.—Authorizing Leeds and Grenville Independent Telephone Co. to erect aerial wires across G.T.R. tracks at road leading from Algonquin to Brockville, between 6th and 7th concessions, Elizabethtown tp., Ont.

5086. July 24.—Authorizing C.P.R. to construct and operate a branch line or spur from point on centre line of main line of the said branch to Thomas Abriel's premises, Nakusp, B.C.

5087. July 22.—Authorizing G.T.R. to construct the Midland branch of its railway across two highways in Lindsay, Ont.

5088. July 23.—Authorizing C.P.R. to construct branch line or spur to Dr. Wyman's premises, Kent, N.B.

5089. July 24.—Authorizing G.T.R. to operate its trains across drawbridge between Hamilton and Niagara Falls, Ont., without being brought to a stop.

5090. July 28.—Authorizing G.T.R. to construct and operate a spur to the Gurney Foundry Co.'s premises in York County, Ont.

5091. July 28.—Authorizing C.N. Quebec Ry. to construct spur to the Lakefield Portland Cement Co., Pointe aux Trembles, Que.

5092. July 30.—Authorizing Malahide and Bayham Telephone Co-operative Association to cross G.T.R. tracks between lots 15 and 16, 11th con., Bayham tp., Elgin Co., Ont.

5093. July 28.—Authorizing C.P.R. to construct and operate a spur across a portion of 6th and 5th Streets, and a lane in block 25, Grand Forks, B.C.

5094. July 28.—Amending order no. 4766, May 27, 1908, ordering C.P.R. to install bell at the crossing where its railway crosses Dorchester St., Quebec, Que., extending time until July 31, 1908.

5095. July 28.—Ordering C.N.R. to erect and maintain such fences, gates and cattle-guards along the portions of its railway between Roblin and Togo and Togo and Runnymede, which shall be suitable and sufficient to prevent cattle and other animals from getting upon its railway.

5096. July 28.—Authorizing G.T. Pacific Ry. to operate that portion of its railway from Saskatoon, Sask., to Scott, Sask., 115 miles.

5097. July 28.—Authorizing J. S. Warren and F. M. Holland, of the Kettle River Valley Ry., to prepare and issue tariffs of tolls to be charged on traffic carried by that railway.

5098. July 29.—Authorizing Chatham, Wallaceburg and Lake Erie Ry. to operate its trains over G.T.R. crossing at William St., Chatham, Ont.

5099. July 28.—Authorizing C.P.R. to lay tracks for a siding across Denison Ave., Weston, Ont.

5100. July 14.—Authorizing G.T.R. to construct and operate a branch line or siding from lot 1, west of Bond St., Brantford, Ont., upon Pearl St., and lot 1, east of McMurray St., to Schultz Brothers' premises.

5101. July 29.—Authorizing the municipality of Notre Dame du Perpetuel Secours de Charny, Que., to construct a public highway across G.T.R. tracks on P. Fontaine's property.

5102. July 29.—Authorizing G.T.R. to cross C.P.R. tracks, Owen Sound section, east of Weston Road, West Toronto, Ont.

5103. July 30.—Ordering railway companies subject to the jurisdiction of the Board, during May, June, July, August, September and October of each year, to provide, place and keep a watchman, track-walker, fire alarm signals, ballast flooring, or fireproof paint, for the purpose of protecting trestles from fire and thereby preventing trains from being burned, derailed or otherwise damaged at or on such trestles, each such company being allowed the option of adopting any one of the said methods of protection. See pg. 621.

5104. July 29.—Approving revised location of G.T. Pacific Ry. from sec. 23, tp. 51, rge. 20, to sec. 1, tp. 52, rge. 21, west of 4th mer., North Alberta.

5105. July 29.—Approving revised location of G.T. Pacific Ry. station in sec. 35, tp. 53, rge. 25, west of 4th mer., Alberta.

5106. July 29.—Rescinding order no. 1174, Dec. 4, 1906, approving rates from Montreal and points within the Montreal terminal group of stations to Boston, Mass. See pg. 639.

5107. July 28.—Ordering G.T.R. to install an electric bell with automatic cut-out at the public highway crossing, northerly from Pitt St., Cornwall, Ont., being the highway immediately west of the G.T.R. station.

5108. July 30.—Authorizing C.N.R. to open for the carriage of traffic that portion of its railway from a point in lot 29, sec. 21, McIrvine tp., to the International boundary near Pither's Point, and forming a proposed connection between the C.N.R. and the Duluth, Rainy Lake and Winnipeg Ry., 1.51 miles.

5109. July 30.—Authorizing C.P.R. to construct and operate a branch line or spur to St. Andrew's, Man., from its Winnipeg Beach branch.

5110. July 29.—Authorizing the city of Hull, Que., to construct a highway across C.P.R. tracks near Mountain Road.

5111. July 30.—Authorizing Edmonton, Yukon and Pacific Ry. to construct and operate a spur to the City Power House and Exhibition Grounds, Edmonton, Alta., crossing Calgary and McLeod Avenues.

5112. July 29.—Authorizing C.N. Ontario Ry., for 90 days from July 29, 1908, to use the crossing with the G.T.R. in Hawkesbury, Ont., for construction purposes.

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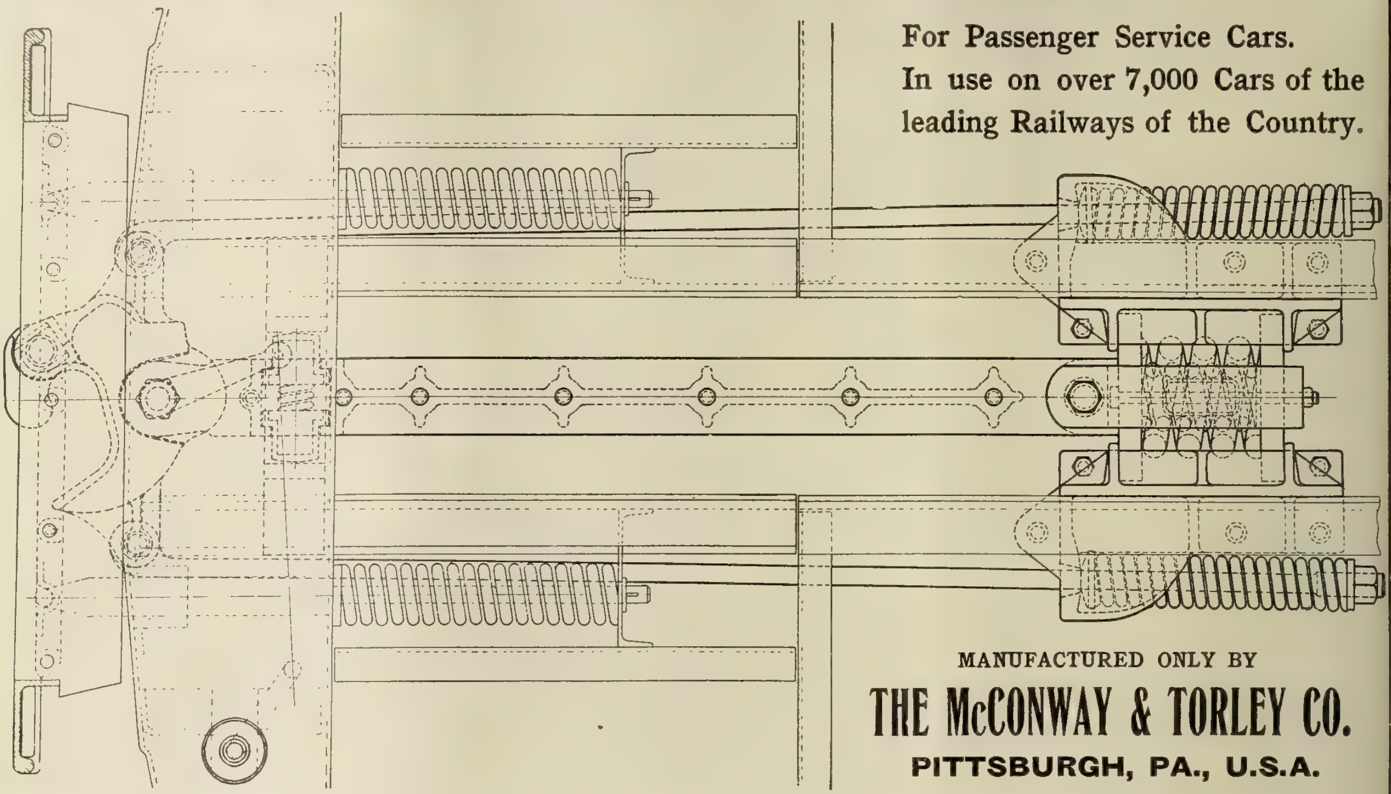

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5113. July 29.—Authorizing Toronto and York Radial Ry. to cross G.T.R. tracks at Sutton, Ont.

5114. July 21.—Dismissing application of G.T.R. for authority to construct a branch line or spur along Neebing Ave., from Montreal St. to Kaministikwia River, Fort William, Ont.

5115. July 28.—Ordering G T.R. to provide, construct and maintain at its own expense such works and appliances as are necessary for the safety of the public at its level highway crossing at Reid St., Peterboro, Ont.

5116. July 30.—Ordering Toronto, Hamilton and Buffalo Ry. and C.P.R. to refund to the Plymouth Cordage Co. excess in the charges paid. See page 639.

5117. July 30.—Authorizing certain agents other than officials of railway companies, acting jointly for two or more companies, to act for the several companies by power of attorney, for the filing of certain tariffs of freight or passenger tolls. See pg. 639.

5118. July 31.—Authorizing the Department of Public Works, Saskatchewan, to construct a highway across C.P.R. right-of-way, Souris branch, on the extension, southerly, of Main St., Oxbow, Sask.

5119. Mch. 12.—Dismissing the application of F. A. Cutting, Boston, Mass., in connection with alleged discrimination in favor of Quebec and Ontario, against New Brunswick, by the C.P.R. See pg. 639.

5120. Aug. 1.—Authorizing James Bay Ry. to place its line or tracks across the C.P.R. tracks, near Wanapitei, Ont.

5121. July 31.—Authorizing Norfolk Gas Co. to lay gas main under G.T.R. tracks between Nelson and Chapman Sts., Port Dover, Ont.

5122. July 16.—Authorizing Brantford and Hamilton Electric Ry. to open for traffic that portion of its line between Ancaster Village and Brantford, Ont.

5123. July 31.—Authorizing C.P.R. to construct a branch line or spur from a point on its line about 400 ft. east of the easterly limit of Duncan St., running in a southerly and westerly direction and reconnecting with its right-of-way about 150 ft. west of the westerly limit of Vickers St., Fort William, Ont.

5124. Aug. 5. — Authorizing Manitoba Government to erect telephone wires across C.P.R. tracks at a point on Portage Ave. 200 yards south of Headingly, Man.

5125. Aug. 5.—Authorizing C.P.R. to open for traffic the second track of three portions of its line in Ontario.

5126. Aug. 5.—Approving Esquimalt and Nanaimo Ry. Co.'s by-law authorizing the Assistant Freight Traffic Manager to prepare and issue tariff of tolls to be charged as provided by the Railway Act.

5127. Aug. 6.—Authorizing Bell Telephone Co. to erect aërial wires across C.P.R. tracks at public crossing near Parry Sound station, Ont.

5128. Aug. 5.—Authorizing Bell Telephone Co. to erect aërial wires across G.T.R. tracks at public crossing 1¼ miles north of Hyde Park station, Ont.

5129. Aug. 5.—Authorizing Farmers' Telephone Co. to erect wires across C.P.R. tracks at Fifth Ave., Hartland, N.B.

5130. Aug. 5.—Authorizing Chatham Gas Co. to lay gas mains under G.T.R. tracks at George and Lacroix Sts., Chatham, Ont.

5131. Aug. 5.—Amending order no. 2916, May 1, 1907, authorizing C.P.R. to close public crossing and open another in lieu thereof at lot cadastral 340, on the west side of the Petite Riviere du Loup, near Louisville, St. Antoine de la Riviere du Loup Parish, Maskinonge Co., Que.

5132. Mar. 27.—Authorizing G.T.R. to construct two branch lines or spurs from its line on Bethune St., Peterboro, Ont., (1) crossing Bethune St. to lot 9 north of Dalhousie St., (2) crossing Bethune St. to lot 9 north of Wolfe St.

5133. July 31.—Authorizing Brockville Water Commissioners to lay, at their own expense, water main under G.T.R. tracks, St. Bartholomew St., Brockville, Ont.

5134. Aug. 5.—Authorizing G.T. Pacific Ry. to operate on its track crossing C.N.R. bridge at Regina, Sask.

5135. Aug. 5.—Authorizing C.P.R. to construct two branch lines or spurs at Cardigan, N.B.

5136. Aug. 5.—Authorizing C.P.R. to operate its trains over the Qu'Appelle, Long Lake and Saskatchewan Ry. and Steamboat Co.'s tracks without being brought to a stop.

5137. Aug. 6.—Authorizing C.P.R. to construct a branch line or spur in Grand Forks, B.C., to the Kettle Valley Lumber Co.'s premises.

5138. Aug. 6.—Approving location of Toronto and Niagara Power Co. transmission line on Beach Road, Nelson tp., Halton Co., Ont.

5139. Aug. 6.—Authorizing the City of Toronto to lay water pipes under G.T.R. Northern Division tracks, Royce Ave., Toronto.

5140. Aug. 5.—Amending items 15 and 23, pgs. 23 and 52 of the Canadian Classification, re classification of printers' cabinets, frames, etc. See pg. 639.

5141. Aug. 7.—Authorizing G.T. Pacific Ry. to open for traffic that portion of its line from mileage 54, Portage la Prairie, Man., to mileage 675, Battle River, Sask.

5142. Aug. 7.—Authorizing G.T. Pacific Ry. to operate that portion of its line from Earl to Scott, Sask., for the purpose of moving a party of settlers.

5143. Aug. 7.—Approving deviation of C.N. Quebec Ry. location between station 1417, 49E, to 1473, 39.7, between mileage 36 and 38 west from Quebec Bridge, Cap Sante Parish, Portneuf Co., Que.

5144. Aug. 7.—Authorizing C.P.R. to construct a branch line or spur to the Pacific Cartage Co.'s premises, Calgary, Alta.

5145. Aug. 5.—Authorizing C.P.R. to construct highway in Tillsonburg, Ont., across G.T.R. tracks, and across C.P.R. and M.C. Rd. joint tracks and lands.

5146. Aug. 6.—Authorizing Walkerton and Lucknow Ry. to open for traffic that portion of its railway between mileage 27.5, Hanover, and mileage 37.7, Walkerton, Ont.

5147. Aug. 11.—Authorizing St. Catharines Gas Co. to lay 3″ gas main under G.T.R. tracks, Page St., St. Catharines, Ont.

5148. Aug. 7.—Amending order 5027, June 30, 1908, authorizing the C.P.R. to operate a branch line to Riley & Julian's premises, sec. 21, tp. 12, range 9, Man., by striking out the word "northeast" in line 18 of the recital part and line 7 of the operative part.

5149. Aug. 7.—Amending order 4018, Nov. 16, 1907, authorizing G.T. Pacific Ry. to construct its railway across certain highways in Saskatchewan from mile 0.00 to mile 34.541, by striking out the figures 216 in line 4 of the operative part, and substituting therefor the figures 261.

5150. Aug. 7.—Authorizing C.P.R. to construct a branch line or spur in rg. 1, Campbell tp., Labelle Co., Que.

5151. Aug. 7.—Approving Brantford and Hamilton Electric Ry. Co.'s by-law authorizing G. E. Waller, General Freight and Passenger Agent, to prepare and issue tolls to be charged for all traffic carried by the company.

5152. Aug. 7. — Authorizing Northern Pipe Line Co. to lay a 6″ pressure pipe under C.P.R. tracks, Wallaceburg, Ont.

5154. Aug. 11.—Authorizing Bell Telephone Co. to erect aërial wires across G.T.R. tracks, Elizabeth St., St. Mary's, Ont.

5155. Aug. 11.—Authorizing C.P.R. to open for traffic that portion of the diversion of the New Brunswick Ry. Co.'s Edmundston branch, between mileage 33.1 and 33.7, and the Grand River bridge.

5156 to 5160. Aug. 11.—Authorizing Wallace municipality to erect its telephone wires across C.P.R. tracks at 5 points in Manitoba.

5161. Aug. 11.—Authorizing Uxbridge and Scott Telephone Co. to erect aërial wires across G.T.R. tracks at 7th con., Uxbridge, or Main St., Uxbridge, Ont.

5162. Aug. 13.—Authorizing C.P.R. to reconstruct bridge 73.1 on the Laggan section of its line, Alta.

5163. Aug. 13.—Authorizing C.P.R. to reconstruct bridge 37.0 on the White River section of its line, Thunder Bay district, Ont.

5164. Aug. 12.—Authorizing Notre Dame de Perpetuel Secours du Charney municipality, Que., to construct at its own expense a highway across G.T.R. tracks on P. Fontaine's property.

5165. Aug. 12.—Approving C.N. Ontario Ry. standard passenger tariff C.R.C. 26, cancelling its standard passenger tariff 1, between Toronto and Sudbury, Ont.

5166. Aug. 12.—Approving C.N. Ontario Ry. standard freight tariff C.R.C. 74, cancelling its standard freight tariff 1, between Toronto and Sudbury, Ont.

5167. Aug. 11.—Authorizing C.P.R. to construct a branch line or spur to T. Abriel's premises, Nakusp, BC.

5168. Aug. 13.—Approving C.P.R. standard freight tariff, applying between Toronto and Sudbury, Ont.

5169. Aug. 13.—Authorizing C.P.R. to operate its trains over the interlocking plant where its line crosses the G.T.R. near Asylum, London, Ont.

5170. Aug. 5.—Authorizing Oxford Oil and Gas Co., to lay a main under C.P.R. near Innerkip station, Ont.

5171. Aug. 14.—Authorizing Central Telephone Association to erect wires across G.T.R. tracks at 4 different points in Ontario.

5172. Aug. 14.—Authorizing G.N.W. Telegraph Co. to erect wires across C.P.R. tracks at the camp grounds, Petewawa, Ont.

5173. Aug. 14.—Authorizing Lang Farmers' Mutual Telephone Co. to erect wires across C.P.R. tracks at Lang, Sask.

5174. Aug. 14. — Authorizing corrected plans of the Kettle River Valley Ry., showing location of line from Grand Forks northerly to Gloucester, Divs. 1 and 2, B.C.

5175. Aug. 13.—Amending order 5133, July 31, 1908, authorizing Brockville Water Commissioners to lay a 6″ water main under G.T.R. tracks, Bartholomew St., Brockville, Ont.

5176. Aug. 14. — Authorizing corrected plans of the Kettle River Valley Ry., showing location of North Fork extension in Divs. 1 and 2, B.C.

5177. Aug. 5.—Approving proposed rearrangement of C.N.R. signalling equipment and gates at Queen St. crossing, Toronto, Ont.

5178. Aug. 14.—Authorizing C.P.R. to construct a branch line or spur to Great West Coal Co.'s premises, Roche Percee, Sask.

5179. July 29.—Authorizing the Wollaston municipality to construct diverted highway across Central Ontario Ry.'s tracks, lot. 11, con 8, Wollaston tp., Ont.

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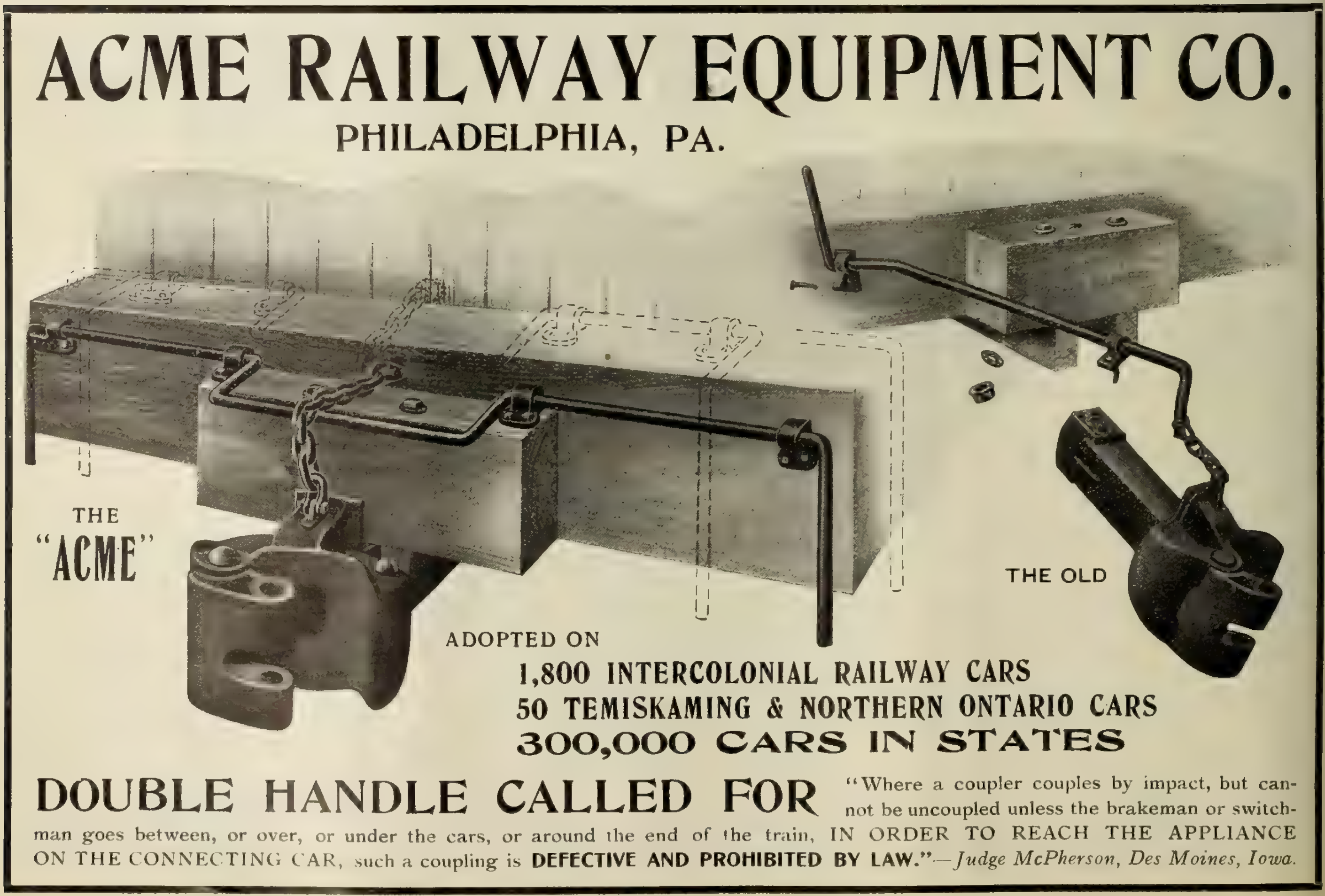

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5180. Aug. 18.—Authorizing Bell Telephone Co. to erect aërial wires across G.T.R. tracks at public crossing, Queen St., Ailsa Craig, Ont.

5181 to 5187. Aug. 14.—Authorizing Woodworth municipality to erect wires across C.P.R. tracks at 7 points in Manitoba.

5188, 5189. Aug. 14.—Authorizing Lang Farmers' Mutual Telephone Co. to erect wires across C.P.R. tracks at 2 points in Saskatchewan.

5190 to 5192. Aug. 18.—Authorizing Bell Telephone Co. to erect wires under G.T.R. tracks at 3 points in Ontario.

5193. Aug. 18.—Approving revised location of G.T. Pacific Ry. from Prince Rupert easterly, mile 0.00 to mile 10.64, Coast District, B.C.

National Transcontinental Railway.

Rapid progress is reported to have been made with the construction of the section of the line between Moncton and Chipman, N.B. The grading is well advanced, a spur line has been laid to a ballast pit near Salisbury, and temporary lines have been laid to permit of the working of steam shovels and construction trains. The contractors' plant on the section includes five steam shovels, 15 narrow gauge locomotives, 120 five-yard cars, 20 convertible cars, 80,000 lbs. capacity; 10 flat cars, 80,000 lbs. capacity, and four concrete mixing plants. It is expected that the track will be ready for laying the permanent rails early in Sept.

S. N. Parent, Chairman of the Commission in charge of the construction of the railway, was at La Tuque, Que., Aug. 12, selecting the site for the yards and divisional buildings at that point.

J. H. Reynolds, President of the Reynolds Construction Co., which has the contract for the construction of the first 150 miles of the line east of the junction with the Temiskaming and Northern Ontario Ry., said that there were over 1,200 men engaged in clearing and grading, and that he expected to get the track laid by the end of the year; it would require another year to do the ballasting and to clean up the line. There was not a great deal of hard work on the 150 miles, the amount of rock work being small. A number of bridges had to be built, the substructures of which would be concrete. The bridge over the Abitibi River is said to be about 1,200 ft. long, and at a height of about 200 ft. above the river. The point of junction with the Temiskaming and Northern Ontario Ry. is about eight miles west of the crossing of the Abitibi River.

The Commissioners are asking for tenders for the supply of 44,447 gross tons of 80-lb. steel rails, for delivery at various points on the mileage under contract.

GRAND TRUNK PACIFIC RY.

On July 30 a special train left Winnipeg, Man., carrying F. W. Morse, Vice-President and General Manager, and other officials, on a trip of inspection over the line. The train went to the end of the steel at Battle River, a point 675 miles west of Winnipeg. Mr. Morse completed arrangements for the opening of a regular train service over portions of the line, which went into operation in Aug., to a point about 50 miles west of Saskatoon, Sask.

The bridge over the Battle River is well advanced, and steel rails and other material are being collected there so that tracklaying may be resumed as soon as the bridge is ready. At Edmonton track has been laid to the bridge across the Saskatchewan River at Clover Bar, and as soon as the superstructure of the bridge is completed tracklaying will be resumed on the roadbed in the direction of Battle River. The distance from the Battle River to the Saskatchewan River at Clover Bar is 112 miles. It is expected that the line will be completed through to Edmonton early in Nov. On the section from Edmonton westerly to Wolfe River good progress is being made with the grading, and one stretch of about 60 miles is expected to be completed by Christmas.

From Prince Rupert, B.C., it is reported that the right-of-way has been cleared easterly for the first 50 miles, and that the clearing on the second 50 miles is well under way. It is announced that the townsite of Prince Rupert will be placed on the market shortly. This announcement is made concurrently with the announcement that F. W. Morse has effected a settlement of some differences with the British Columbia Government over the waterfront sites. The water frontage is in all 28,500 ft. The Government by the original agreements got 8,500 ft. of this. By the agreement now consummated this is divided into five strips of unequal length, ranging from 1,000 ft. to 3,000 ft. and located at points which, in the opinion of the Government engineers, will prove of strategic importance for the development of the northern city. The railway obtains all the land required for terminal purposes, but ceded the Government 23 acres in other parts of the townsite for the surplusage of land they receive, en bloc.

PACIFIC NORTHERN AND OMINECA RY.

The railway subsidies act passed last session of the Dominion Parliament provided for the aiding upon the usual terms and conditions, of a line of railway from Kittimat to the Telkwa River, B.C., a distance not exceeding 110 miles. (Aug., pg. 557.)

G.T. PACIFIC BRANCH LINES.

The Dominion Parliament last session voted a subsidy at the rate of $3,200 a mile, with the usual provisions as to an increase to $6,400 a mile, towards the construction of a railway from Montreal, northerly to a junction with the National Transcontinental Ry. (Eastern Division G.T. Pacific Ry.), not exceeding a distance of 200 miles. It transpired in the course of the discussion that the application for the subsidy stands in the name of the Premier, and that it was being asked for as a result of a very large deputation which waited on the Government from the city of Montreal. The Minister of Railways said unless it was the G.T. Branch Lines Co., he did not know what company would be in a position to construct this line; the policy of the Government was to give the bonus to the first company that will show its readiness and ability to construct the railway.

A subsidy on the same terms was also voted for the construction of the line, now nearly completed, and known as the Lake Superior Branch, extending from Fort William and Port Arthur, Ont., to a junction with the National Transcontinental Ry. (Eastern Division G.T. Pacific Ry.), a total not exceeding 220 miles.

During June, 28 men were killed and 32 injured in the course of their employment in railway work in Canada. Of the fatalities 7 were due to being run over, 10 to explosions of dynamite, 2 each to derailments, to being struck by passing objects, and to being caught between cars, 1 each to a fall, to suffocation by gasolene fumes, to being struck by train, and 2 to drowning. Of the non-fatal accidents, 8 were due to being run over, 7 to derailments, 6 to falls, 4 each to being caught between cars and to falling materials, 1 each to flying material, to an explosion of dynamite, and to machinery.

Buffalo and Lake Huron Railway Co.

Following is the report for the half-year ended June 30, 1908: After providing for the interest on the first and second mortgage bonds, the available balance, as shown by the revenue account, including the amount brought forward from the previous half-year, was £14,654 18s. 8d., enabling the directors to pay the usual dividend of 5s. 3d. per share, and leave a balance of £870 5s. 5d. to be carried forward as against £813 8s. 6d. Since issuing the last report the company's investments have been changed by the sale of 3 Buffalo and Lake Huron shares and £1,000 G.T.R. perpetual 4% consolidated debenture stock, and the purchase of $7,000 Northern Pacific Ry. 3% general lien railway and land grant gold bonds.

BALANCE SHEET, June 30, 1908.

		£	s.	d.
Share capital: 52,513 ordinary shares of £10 each, fully paid...		525,130	0	0
Bonded debt:				
First mortgage 5½% £100 Bonds.........	£297,600			
Second mortgage 5½% £100 Bonds.........	466,158			
		763,758	0	0
Interest on bonds accrued from Mar. 1 to June 30..................		14,002	4	8
Dividends unclaimed.............		1,101	8	6
Interest unclaimed...............		3,949	4	11
Sundry creditors................		176	15	8
Balance from Revenue Account....		14,654	18	8
		£1,322,772	12	5

	Nominal Amount. £	s.	d.	£	s.	d.
Cost of property on transfer of undertaking to the G.T.R. Co. on lease, after deducting all expenses in connection with the transfer..				1,278,882	10	5
Investments:						
Buffalo & Lake Huron Ry. Co. 5½% first mortgage bonds...£	600	0	0			
5½% second mortgage bonds........	11,866	13	4			
Bond scrip & share fractions.........	27	16	0			
7,000 Northern Pacific Ry. 3% general lien railway and land grant gold bonds.......	1,400	0	0			
	£13,894	9	4			
Cost price....................				8,062	17	8
Cash at bankers.................				827	4	4
Rental to June 30, 1908, due from the G.T R. Co., payable September 1, 1908...................				35,000	0	0
				£1,322,772	12	5

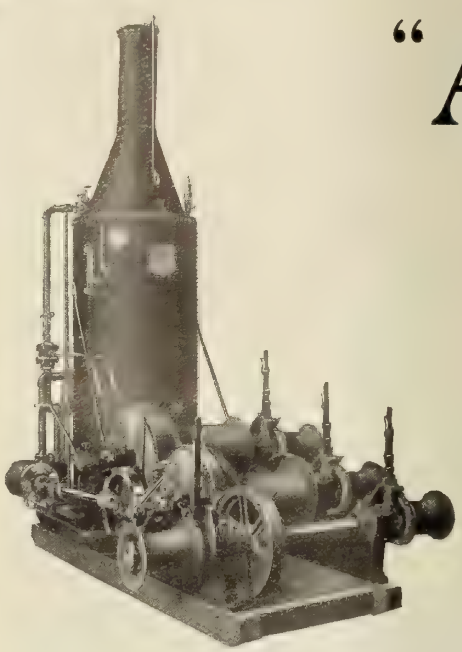
REVENUE ACCOUNT.

				£	s.	d.
Balance as shown in last half-year's report.....£	14,598	1	9			
Less 75th dividend on share capital, at 5s. 3d. per share........	13,784	13	3			
				813	8	6
Interest on investments............				377	10	5
Interest on deposit at bankers.......				12	9	3
Rental to June 30, 1908, payable by the G.T.R. Co., on September 1, 1908..........................				35,000	0	0
				£36,203	8	2

				£	s.	d.
Interest payable as under:						
5½% on £297,600 1st mortgage bonds.....£	8,184	0	0			
5½% on £466,158 2nd mortgage bonds.	12,819	6	11			
				21,003	6	11
London office rent and management expenses£	350	0	0			
Directors' remunerat'n.	150	0	0			
Miscellaneous expenses.	20	19	7			
Auditors' fee..........	21	0	0			
Law expenses.........	3	3	0			
				545	2	7
Balance available for dividend.......				14,654	18	8
				£36,203	8	2

The directors for the current year are: M. H. Maxwell, Chairman; E. Ashwell, Liverpool, Eng., and J. M. Synge, Heswall, Eng.

The Engineers' Club of Toronto recently visited Peterboro, Ont., inspecting the lift lock, etc., and after a trip through the Trent canal and the Kawartha lakes returned to Toronto.



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AMERICAN HOIST & DERRICK CO.
ST. PAUL, U.S.A.
CHICAGO NEW YORK PITTSBURG NEW ORLEANS SAN FRANCISCO

THE ELECTRIC HEADLIGHT

The following letter was received under date of May 8, 1908, from Mr. J. W. Cleary, Travelling Engineer Pyle-National Electric Headlight Co.:

"I learn from ______________________ the Master Mechanic here, that an engineer running between ____________________ and ____________________ discovered a broken rail with the Pyle-National Electric Headlight and made the stop without ditching his train. One or two pairs of wheels got off, but that was a small affair to what it would have been where a foot of the rail was broken off. Also an engineer running east of here found some cars shoved out on the main line. He saw them with the 'Electric' and made the stop without hitting them."

PYLE-NATIONAL ELECTRIC HEADLIGHT CO.
MONADNOCK, CHICAGO

Railway Commissioners' Traffic Orders.

4988. July 8.—This order, re interswitching charges, was published in full in our Aug. issue. We are officially advised that it will become effective Sept. 1.

CHANGES IN FREIGHT CLASSIFICATION.

5022. July 7.—In the matter of the application of the Canadian Freight Association for the approval of its proposed supplement 1 to Canadian Classification 13. Upon reading what has been alleged in support of the application and on behalf of the Canadian Manufacturers' Association, and upon the report of its Chief Traffic Officer, the Board orders that the changes and additions embodied in the proposed supplement 3 (filed as no. 1) to Canadian Classification 13 be approved, subject to the following conditions, namely:

(a) That the proposed changes with respect to automobiles be suspended pending the decision with respect to the proposed reclassification of automobiles in the so-called official classification territory;

(b) That the proposed advance in the minimum weight for petroleum and petroleum products, including compounded petroleum oils and greases, in carloads, from 24,000 to 26,000 lbs. per carload, be struck out as being contrary to rule 1 of the classification, which rule, with respect to special provision, contemplates reductions only;

(c) That the proposed changes with respect to brushes be altered to read as follows:

Brushes, toilet, boxed...Less than carload, 1st Class.
Brushes; not otherwise specified:
  In bales or bundles...Less than carload, 1st Class.
  In boxes............Less than carload, 2nd Class.
Brushes, all kinds, carloads, minimum, 20,000 lbs., 4th Class.

(d) That the proposed changes with respect to empty barrels, etc., be altered to read as follows:

Barrels, casks, kegs, empty; carloads, prepaid:
  In box or stock cars,—
    Ale and beer, minimum, 20,000 lbs....10th Class.
    Not otherwise specified, minimum 14,000 lbs., 7th Class.
Racked platform cars, 4,000 lbs. per car greater than for box or stock cars, as above.

And the Board further orders that the said supplement become effective within three weeks from the date of the receipt of the order by the Chairman of the Advisory Committee of the Association, or, in his absence, by his representative.

G.T.R. OVERCHARGE ON LUMBER.

5029. July 16.—In the matter of the complaint of A. Barnet & Co., of Brule Lake station, Ont., complaining of the action of the G.T.R. Co. in increasing its rate on lumber between Brule Lake station and Ottawa, from 7c. per 100 lbs. to 9½c. per 100 lbs., and applying for an order directing the G.T.R. to refund to the Montreal Lumber Company at Ottawa any freightage paid by it in excess of the said 7c. rate. Upon reading what has been alleged in support of the application, and on behalf of the G.T.R., and upon the report of its Chief Traffic Officer, the Board orders the G.T.R. to refund to the Montreal Lumber Co., Ltd., $332.07, being the total amount of the overcharge complained of.

G.T.R. JOINT TARIFFS WITH O. & N.Y.R.

5079. June 17.—In the matter of the complaint of the Ottawa and New York Ry. Co. against the cancellation by the G.T.R. Co. of certain joint freight tariffs heretofore in force between stations on the applicant company's line of railway and the G.T.R., and asking that the G.T.R. be enjoined from carrying the proposed cancellation into effect. Upon reading what has been alleged in support of the application and on behalf of the G.T.R., and upon the report of its Chief Traffic Officer, the Board orders that the said railway companies agree forthwith on joint tariffs for freight traffic interchanged at or near Cornwall, Ont., which originates at or is destined to local points on the O. & N.Y. Ry., to replace the joint tariffs cancelled by the G.T.R., the said joint tariffs to be lower than the sum of the local tariffs of the said companies respectively to and from Cornwall. And the Board further orders that the said joint tariffs be published and filed with no greater delay than may be necessary for the purpose of entering into the said agreement and the subsequent compilation and publication.

MONTREAL-BOSTON BALANCED RATION RATES.

5106. July 29.—In the matter of the joint application of the Freight Traffic Managers of the C.P.R. Co. and the G.T.R. Co. under sec. 29 of the Railway Act, for an order rescinding the order of the Board, no. 1174, dated Dec. 14, 1906, approving the rate of 10½c. per 100 lbs., being the rate which the said railway companies carried the balanced ration, otherwise compressed food or fodder, in carloads, from Montreal and points within the Montreal terminal group of stations, to Boston, Mass. Upon the report and recommendation of its Chief Traffic Officer, the Board orders that the said order be rescinded.

REFUNDS BY C.P.R. AND T. H. & B. RY.

5116. July 30.—In the matter of the complaint of the Plymouth Cordage Co., complaining that the rate exacted by the Toronto, Hamilton and Buffalo Ry. Co. and the C.P.R. Co., on two carloads of binder twine, for export, shipped from Welland, Ont., to Montreal, Que., was excessive, and applying for an order directing the said companies to refund the excess so charged. Whereas it appears that the rate charged the complainants on the said shipment from Welland to Montreal was 22c. per 100 lbs., and the rate that should have been charged under the Board's order dated July 25, 1905, in what is known as the Dominion Millers' Export Rate case, was 15½c. per 100 lbs. Upon the report and recommendation of its Chief Traffic Officer the Board orders: (1) That the railway companies be required to refund to the complainants the difference between the rate charged, namely 22c. per 100 lbs., and 15½c. per 100 lbs.

(2) That interest on the amount of the difference between the rates herein referred to, at the rate of 5% per annum, be paid by the railway companies to the complainants, the same to be estimated from the date the said excess in the charges was paid, until the date when the amount of the said overcharge is refunded.

FILING OF TARIFFS OF TOLLS BY ATTORNEYS

5117. July 30.—Whereas, certain railway companies subject to the legislative authority of the Parliament of Canada have found it convenient for certain tariffs of freight or passenger tolls to be filed with this Board by agents, other than officials of the companies, acting jointly for two or more companies; and whereas no objection seems to exist to the continuation of the said arrangement, the Board orders: (1) That the said arrangement may be continued until otherwise ordered, provided that the said joint agents be duly authorized to act for the several companies by power of attorney, the original of which shall be filed with the Board and bear a number with the prefix "C.R.C. no. P.A." in the upper right hand corner.

(2) That the said power of attorney be in the following form:

"C.R.C. no. P.A....
....................Company.
....

KNOW ALL MEN BY THESE PRESENTS:

That the.....................Company has made, constituted, and appointed, and by these presents does make, constitute, and appoint.....................
its true and lawful attorney and agent for the said company, and in its name, place, and stead, to file certain tariffs of freight (or passenger) tolls, to wit (here describe the particular series), and supplements thereto, as required of railway companies by the Railway Act of the Dominion of Canada, and by the regulations of the Board of Railway Commissioners for Canada; and the said.................................
Company does hereby give and grant unto its said attorney and agent full power and authority to do and perform all and every act and thing above specified as fully to all intents and purposes as if the same were done and performed by the said company, hereby ratifying and confirming all that its said agent and attorney may lawfully do by virtue thereof, and assuming full responsibility for the acts and neglects of its said attorney and agent hereunder.

This power of attorney shall continue in force until revoked by formal and official notice of revocation placed in the hands of the Board of Railway Commissioners for Canada at Ottawa at least 10 days before the said notice shall become effective.

By........................
(Witness)...................
Dated at.......................
this........day of........A.D.........."

ALLEGED C.P.R. DISCRIMINATION.

5119. Mar. 12.—In the matter of the complaint of F. A. Cutting, Boston, Mass., under sec. 315 of the Railway Act, complaining that the C.P.R. Co. unjustly discriminates in favor of the provinces of Quebec and Ontario, and against the province of New Brunswick, in refusing to carry tan bark from its stations in New Brunswick destined to New England points, at the same rates as it charges for lumber, and allowing the same rates on tan bark from points in the provinces of Quebec and Ontario as are charged on lumber. Upon the hearing of Counsel and tanners in the province of New Brunswick and the Railway Co., the evidence adduced, and what was alleged; and upon the report of its Chief Traffic Officer, the Board orders that the complaint in this proceeding be dismissed.

MILLER & RICHARDS' COMPLAINT.

5140. Aug. 5.—In the matter of the complaint of Miller and Richards, Winnipeg, Man., alleging that the classification of printers' type cabinets, printers' type cases, and printers' imposing stone tables, in the Canadian classification, at 1½ times first-class for less than carload shipments, is unreasonable, and asking that the Board direct that the said articles be placed in a lower class in the said classification: Upon the consent of W. R. MacInnes, Chairman of the Advisory Committee of the Canadian Freight Association, on behalf of the said Association, and of complainants; and upon the recommendation of its Chief Traffic Officer, the Board orders that items 15 and 33, 23 and 52, of the Canadian classification, be eliminated, and the following substituted therefor in the next following supplement thereto:

	L.C.L.
Furniture cabinets, printers', crated, O.R.B. & C., or boxed	1
Frames, imposing stone, printers', crated, O.R.B. & C., or boxed	1
Imposing stone frames and cabinets combined, crated, O.R.B. & C., or boxed	1
Printers' cases, in bundles, racks, or crates, O.R.B. & C.	1
Printers' case stands and racks, crated, O.R.B. & C., or boxed	1

◆

Minneapolis, St. Paul and Sault Ste. Marie Ry.—The directors have declared the half-yearly dividends of 3½ per cent. on preferred stock and 3 per cent. on common stock

THORNYCROFT AUTOMOBILES

HIGH-CLASS
CARS
ONLY
From 14 to 75 H.P.

Prices Range
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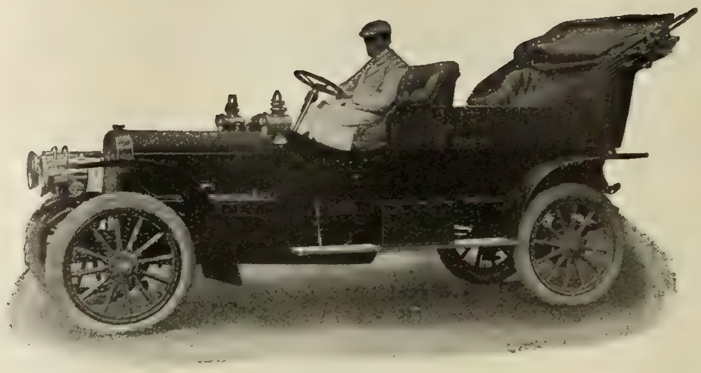

45 H.P. Six-Cylinder Car.

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HAMILTON, CANADA. LIMITED

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FORGINGS—MARINE AND RAILROAD

IN ROUGH, ROUGH-TURNED OR SMOOTH FINISHED. SPECIALTY OF HEAVY FORGINGS

PIG IRON, IRON AND STEEL BARS.

Railway Rolling Stock Notes.

The G.T. Pacific Ry., up to Aug. 1, has placed orders for rolling stock as follows: 6 mail and express coaches, 12 baggage cars, 18 second-class baggage and smoking coaches, 10 second-class and 18 first-class coaches, 6 sleeping coaches, 7,425 box cars, 1,000 flat cars, 700 ballast cars, 45 cabooses, 50 mogul passenger locomotives, 37 construction locomotives, 10 steam shovels, and 659 miscellaneous construction cars.

The Eastern British Columbia Ry. has ordered 2 consolidation freight locomotives from the Montreal Locomotive Works. Following are chief particulars:

Cylinders	20″ by 28″
Drivers, diar	51″
Boilers, diar	74″ and 77″
" pressure	210 lbs.
Firebox	107″ by 62¼″
Tubes	360 2″ diar. by 12′ 9¾″ long
Driving wheel base	14′ 6″
Wheel base, engine	22′ 3″
" " and tender	54′ 9″
Weight on engine truck	19,000 lbs.
" " drivers	165,000 lbs.
" of tender	108,000 lbs.
" " engine, total	184,000 lbs.
Tank capacity	5,500 U.S. galls.

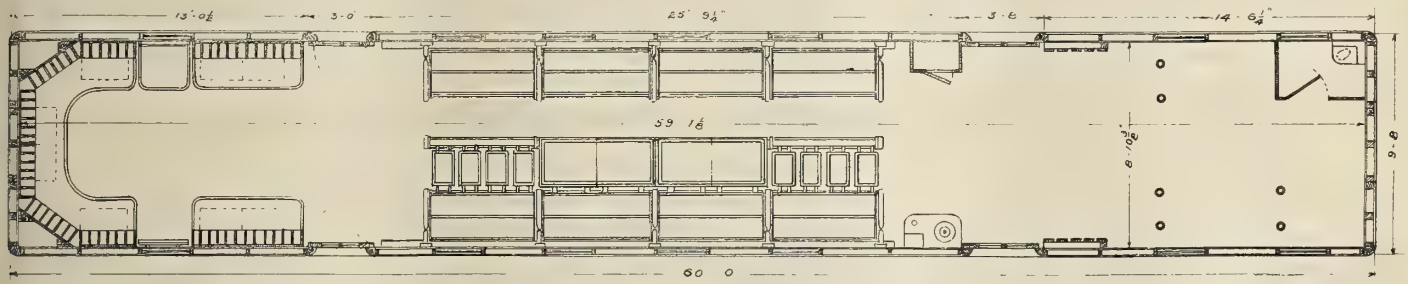
The Michigan Central Rd. has placed an order for 3 passenger locomotives, Pacific type, with the Montreal Locomotive Works. Following are chief particulars:

Cylinders	22″ by 26″
Drivers	75″ diar.
Boilers	72″ and 75″
" pressure	200 lbs.
Firebox	108″ by 75¼″
Tubes	394 2″ diar. by 21 ft. long
Driving wheel base	13 ft.
Wheel base, engine	33′ 7½″
" " " and tender	63′ 11″
Weight on engine truck	46,000 lbs.
" drivers	146,000 lbs.
" trailer	43,000 lbs.
Weight of tender	145,000 lbs.
" engine, total	235,000 lbs.
Tank capacity	7,000 U.S. galls.

Following are chief dimensions and details of special equipment of the 10 ten-wheel passenger locomotives the C.P.R. is constructing at its Angus, Montreal, shops:

Weight on drivers	141,000 lbs.
" total	190,000 lbs.
Cylinders	22½″ by 28″
Drivers	63″ diar.
Boiler, type	Wagon top
" pressure	180 lbs.
Heating surface, total	2,418 sq. ft.
Tubes, number and diar	240 2″, 24 5″
" length	14′ 3″
Firebox	8′ 6⅛″ by 5′ 0⅞″
Grate area	40 sq. ft.
Tank capacity	5,000 Imp. galls.
Coal capacity	10 tons
Air brakes	Westinghouse automatic
Axles	Mild steel
Brake beams	Simplex truss
" shoes	C.P.R. standard
Couplers	Tower
Headlights	C.P.R. standard electric
Journal bearings	C.P.R. standard
Springs	C.P.R. standard crucible
Steam heating	Gold system
Tires	Krupp crucible
Wheel centres	Cast steel
Superheater	Vaughan-Horsey

The G.T.R. has placed in service, on the Montreal-Toronto run, two mail cars which have recently been constructed at its Point St. Charles shops. The cars are built on 6-wheeled trucks, having 38 ins. steel-tired wheels, with cast iron centres, and are equipped with Westinghouse air brakes and air signals, automatic coupler buffing device, and straight steam heating apparatus. The interiors of the cars have been constructed in accordance with plans approved by the Comptroller of the Railway Mail Service, and do not differ materially from those of the ordinary mail cars, excepting that they are fitted with sorting boxes, tables, drawers and bag racks of the most improved and convenient type, and also with letter sorting indicator, which enables the station to be shown in either direction in which the train may be moving. The heating is also arranged so that the heat under the sorting boxes is reduced to a minimum. A plan view of the car is given on this page, showing the dimensions, etc.



GRAND TRUNK RAILWAY 60 FT. MAIL CAR.

* * *

Railways Under Provincial Laws.

The Dominion Railway Act of 1903 was made by sec. 5 to apply to "all persons, companies and railways, other than Government railways, within the legislative authority of the Parliament of Canada. The following railways have been constructed under the authority of acts of the several provincial legislatures, and are subject to the provisions of the Railway Act as provided in sections 6 and 7 only. These sections provide (sec. 6): "Where any railway, the construction or operation of which is authorized by a special act passed by the Legislature of any province, is declared, by any act of the Parliament of Canada, to be a work for the general advantage of Canada, this act shall apply to such railway, and to the company constructing or operating the same, to the exclusion of such of the provisions of the said special act as are inconsistent with this act, and in lieu of any general railway act of the province"; (sec. 7): "The provisions of this act in respect of tolls, tariffs, and joint tariffs shall, so far as they are applicable, extend to the traffic carried by any company by sea or by inland water between any ports or places in Canada if the company owns, charters, uses, maintains or works, or is a party to any arrangement for using, maintaining or working vessels for carrying traffic by sea or by inland water between any such ports or places; (2) The provisions of this act in respect of tolls shall, in so far as they are applicable, extend and apply to (a) any company which has power under any special act to construct, maintain and operate any bridge or tunnel for railway purposes, or for railway and traffic purposes, and to charge tolls for traffic carried over, upon or through such structure by any railway; and (b) the traffic so carried over upon or through such structure."

Following is a complete list of railways which were constructed under provincial charters and to which the Railway Act applies as modified by these sections:

	Miles	Miles
Nova Scotia.—		
Cape Breton Ry		31.00
Halifax and South Western Ry.—		
Nova Scotia Central Ry	74.00	
Nova Scotia Southern Ry	22.00	96.00
Liverpool and Milton Ry		5.50
Middleton and Victoria Beach Ry		41.00
Midland Ry. of Nova Scotia		59.00
New Glasgow Iron, Coal and Ry. Co		12.50
Sydney and Louisburg Ry		53.99
New Brunswick.—		
Buctouche and Moncton Ry		32.00
Caraquet Ry		68.00
Central Ry. of N.B. (now N. B. Coal and Ry. Co.)		59.66
Gulf Shore Ry		16.78
Hampton and St. Martin's Ry		30.00
Kent Northern Ry		27.00
Restigouche and Western Ry. (now International Ry. of N.B.)		29.00
St. John Bridge and Ry. Extension Co. (leased to C.P.R.)		2.00
York and Carleton Ry		5.75
Quebec.—		
L'Assumption Ry. (now abandoned)		3.50
Lotbiniere and Megantic Ry		30.34
Phillipsburg Ry. and Quarry Co		7.50
Quebec and Lake St. John Ry		244.00
Quebec Central Ry		213.50
Ontario.—		
Brockville, Westport and Northwestern Ry		45.00
Carillon and Grenville Ry		13.00
Manitoulin and North Shore Ry		16.00
Magnetawan Ry		1.91
Nosbonsing and Nipissing Ry		5.50
Ontario, Belmont and Northern Ry. (now Marmora Ry. and Mining Co., leased to Central Ontario Ry.)		9.60
Pembroke Southern Ry. (leased to Canada Atlantic Ry.)		20.90
Temiskaming and Northern Ontario Ry		——
British Columbia —		
Crow's Nest Southern Ry		53.20
Kaslo and Slocan Ry		31.08
Lenora-Mount Sicker Ry		11.50
Morrissey, Fernie and Michel Ry		10.85
New Westminster Southern Ry		24.10
Victoria and Sidney Ry		16.26
Victoria Terminal Ry. and Ferry Co		18.40
Wellington Colliery Ry		10.75

* * *

The Locomotive Engineers Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $60,000, and office at St. Thomas, to erect and carry on lodge rooms, for the use of locomotive engineers and trainmen, throughout Ontario. The provisional directors are: J. J. Worden, J. Collinson, R. A. Ray, N. Vail, C.W. Knight, G. Wilson, D. C. Walker, C. L. Wilson, and D. Miller, all locomotive engineers, St. Thomas.

The Standard Railway Equipment Co. of Canada, Ltd., has been incorporated under the Dominion Companies Act, with a capital of $49,000 and office at Montreal, to manufacture and deal in equipments, appliances, and specialties for railway cars, tramcars, etc., and mechanical devices for train equipment. The provisional directors are: F. H. Markey, W. W. Skinner, R. C. Grant, Montreal; G. G. Hyde, C. E. Hyde, Westmount, Que.

The Universal Signal Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $1,000,000 and office at Toronto, to acquire, hold and dispose of inventions for signalling and stopping railway trains; to manufacture trucks, cars, etc., and all machinery for the use of power of all kinds. The provisional directors are: T. R. Meredith, G. E. Foster, J. A. Street, J. A. McEvoy, G. Russell, E. M. Lindsay, V. Waldock, Toronto.

THE McCORD MALLEABLE IRON JOURNAL BOX

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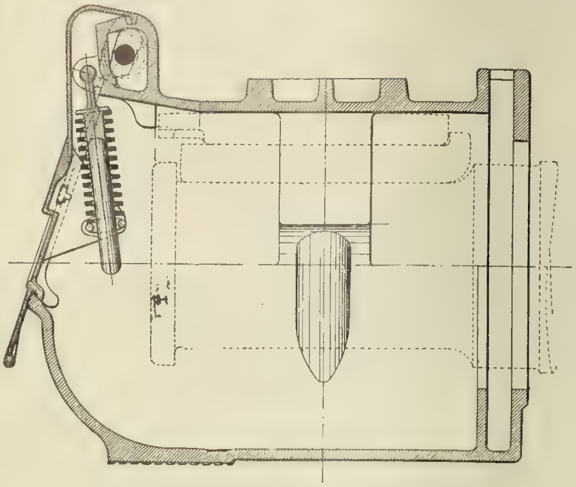

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STRICTLY HIGH GRADE. TESTED & PACKED

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SYRACUSE, N.Y., U.S.A.

Canadian Northern Ry. Construction.

St. John Valley Ry.—The railway subsidies act passed at the last session of the Dominion Parliament provided for the granting of financial aid towards the construction of the following lines of railway: From Westfield to St. John, N.B., not exceeding 14 miles; from Gagetown to Fredericton, N.B., not exceeding 40 miles; and from a point between Centreville and Woodstock, to a point at or near Grand Falls, N.B., not exceeding 55 miles. These subsidies cover a considerable portion of the route of the line which the New Brunswick Legislature has authorized the Government to give a guarantee of bonds to the extent of $15,000 a mile, and for the construction of which negotiations have been opened with Mackenzie, Mann & Co., with a view to the line becoming part of the Canadian Northern Ry. system.

Quebec and Lake St. John Ry.—The Dominion Parliament at its recent session voted subsidies in aid of the following branch lines: From Valcartier station to St. Catherines, Que., not exceeding 3.8 miles; from Valcartier station towards Gosford, not exceeding 5.50 miles; from the end of the 35th mile of the branch to La Tuque, on the River St. Maurice, to La Tuque Falls, not exceeding five miles; and from a point on the La Tuque branch to the steamboat landing near La Tuque, not exceeding 1.6 miles; a total not exceeding 20.9 miles. The branch to La Tuque Falls has been completed and some construction work has been done on the St. Catherines and Gosford branches.

The subsidy voted in 1906 for the construction of a line of railway from Roberval, the present terminal of the line on Lake St. John, westerly towards James Bay, for a distance of 100 miles, was revoted. The subsidy act also provided for grants towards the construction of the following lines: From Hebertville to St. Joseph d'Alma, not exceeding 10 miles; and for a line from Chicoutimi, south or south-east, not exceeding five miles.

Canadian Northern Quebec Ry.—The Dominion Parliament last session voted a subsidy to the C.N.Q. Ry for a line from near Garneau Jct. to Quebec, with a branch to or towards the Quebec Bridge, not exceeding 83 miles, in lieu of the subsidy, for a distance not exceeding 70 miles, voted to the Great Northern Ry. of Canada in 1906. A subsidy was also voted to the C.N.Q. Ry. towards the cost of the construction of a line from Montreal, Que., to Hawkesbury, Ont., not exceeding 65 miles; and to the Great Northern Ry. of Canada, which is one of the constituent companies of the C.N.Q. Ry., towards the construction of a line from St. Jerome to Charlemagne (Bout de L'Ile), Que., a distance not to exceed 22 miles.

In 1906 the Dominion Parliament voted a subsidy to the G.N. Ry. of Canada towards the construction of a line from or near Arundel, to a point in the united townships of Preston and Hartwell, Que., not exceeding 30 miles in length; and for a line connecting its Montford and Gatineau line with the main line at St. Jerome, not exceeding 15.2 miles. These subsidies were revoted at the last session of the Dominion Parliament to the C.N.Q. Ry.

Of these several lines work is in progress upon the cut-off from Garneau Jct. to Quebec, with the branch to the Quebec Bridge, and the line to St. Jerome has been completed to the junction with the Montford branch. The extension of this branch has not yet been gone on with, and beyond surveys nothing has been done upon the projected lines from Montreal to St. Jerome, and from Montreal to Hawkesbury.

Canadian Northern Ontario Ry.—At the last session of the Dominion Parliament a subsidy at the usual rate and upon the usual conditions was voted towards the construction of a line from Hawkesbury to Ottawa, Ont. The construction of this line, which is an extension of the C.N.Q. Ry., is well advanced.

W. Mackenzie, President, and D. D. Mann, Vice-President, C.N. Ry., had a conference with C.P.R. and G.T.R. officials at the Toronto Union Station, Aug. 18, and it is understood that arrangements are being completed for the entry of the C.N.O. Ry. trains into Toronto over the C.P.R. instead of over the G.T.R. tracks as at present.

We are advised that the proposed branch from Udney, on the Toronto-Sudbury line, into Orillia, Ont., will be constructed this season.

To aid in the construction of the line from Sudbury Junction to Hutton Mines, Ont., the Dominion Parliament at its recent session made provision for the payment of a minimum subsidy of $3,200 a mile, increasing to $6,400 a mile as the cost exceeds $15,000 a mile, the length of line so aided not to exceed 30 miles. The line has been constructed and was opened for traffic July 3.

Nipigon Ry.—The subsidies voted by the Dominion Parliament to the N. Ry. in 1906, for the construction of in all 80 miles of line, were revoted at the recent session, the mileage being divided as follows: From near Nipigon station, on the C.P.R., to Nipigon Lake, not exceeding 30 miles; from a point on Nipigon Bay of Lake Superior, to a point on the west of Lake Helen, on the line of the Nipigon Ry., not exceeding 3.50 miles; from a point on the line near the crossing of the Fraser River to Lake Jesse, by way of Cameron's Falls, not exceeding 1.50 miles; from a point on the north shore of Lake Nipigon northerly, not exceeding 45 miles. The charter for the construction of these lines is now controlled by Mackenzie, Mann & Co. (Ltd.), on behalf of the Canadian Northern Ry. It is understood that some portion of these lines will be utilized when the company's line to connect the line west of Port Arthur with the C.N.O. Ry. at Sudbury is constructed.

Canadian Northern Ry.—In connection with the work of betterment on the C.N. Ry. between Port Arthur, Ont., and Winnipeg, Pease Bros., of Port Arthur, have been given a contract for a section near Kabaigon, a point 57 miles west of the Lake terminal. In referring to this contract the Railroad Age Gazette of Aug. 7 places the contractors at work at Wabigoon, Ont., which is a point not on the C.N. Ry., but on the C.P.R., 202 miles from Port Arthur, and approximately about 150 miles westerly and northerly from Kabaigon, where the work is being done.

Tracklaying has been started on the Goose Lake line, and it is expected that the line will be opened from Saskatoon to Goose Lake, Sask., this fall. Some portion of the route graded during 1907 has been abandoned, and a new location made.

At the last session of the Dominion Parliament an act was passed guaranteeing the bonds of the company to the extent of $13,000 a mile towards the construction of the following lines: From near Regina, Sask., to the western boundary of Manitoba, there connecting with the company's branch from Brandon, a distance of 152 miles; from near Saskatoon, Sask., southerly and westerly towards Calgary, Alta., 175 miles; from near Prince Albert, Sask., by way of Battleford and Battleford Junction, to Battleford, Sask., excluding, however, the mileage between North Battleford and Battleford Junction, not exceeding 135 miles; from the company's Thunder Hill branch at or near the western boundary of Manitoba in a generally westerly direction towards Rosthern, for a distance not exceeding 100 miles; and for an extension of the company's Rossburn line from the western boundary of Manitoba in a northwesterly direction, for a distance not exceeding 50 miles. The first mentioned of these lines is completed, and it is understood that the Goose Lake branch, now under construction, will ultimately be extended to Calgary, and so earn the second mentioned guarantee. Nothing has been done, except in the way of surveys, in connection with the projected Prince Albert-Battleford line. The extension of the Thunder Hill branch will give a line about midway between the main line to Edmonton and the Prince Albert line, and the company's maps show that a line is projected on the eastern bank of the Saskatchewan River to connect all the three lines. The projected extension of the Rossburn branch will carry it towards a junction with the Gilbert Plains-Edmonton line.

Edmonton, Yukon and Pacific Ry.—The Dominion Parliament last session passed an act guaranteeing the bonds of the company to the extent of $13,000 a mile for the first 50 miles of line, and to the extent of $25,000 a mile for a further distance of 100 miles at the rate of 3½%, payable half-yearly, the principal to be re-payable in 50 years. The line to be constructed is to start from a point on the company's line, or on the line of the Edmonton and Slave Lake Ry., at or near Edmonton or Strathcona, Alta., and to proceed thence in a generally westerly direction to the coal areas at or near the Brazeau River, and the headquarters of the McLeod River. The act guarantees the principal and interest of the bonds, and the Government is secured by means of a first mortgage upon the lines to be constructed, the rolling stock, franchises and other property of the company. The guarantee of bonds is not to be given until the Edmonton, Yukon and Pacific Ry. has become amalgamated with the Canadian Northern Ry., with the latter title, nor until the amalgamated company has made itself liable for the payment of the principal and interest of the securities so guaranteed. (Aug., pg. 545.)

◆

Railway Lands Patented.—Letters patent covering lands in the western provinces were issued to railways during May as follows:—

	Acres.
Canadian Northern Ry.	5,763.00
C.P.R. grants	454.00
C.P.R. grants, Souris branch	969.68
G.T. Pacific Ry. grants	303.51
Manitoba South Western Col. Ry	160.00
	7,650.19

Board of Railway Commissioners.—The next sittings of the Board will be held at Ottawa, Sept. 1, when a large number of cases have been set down for disposal. One of considerable importance is the application of the G.T.R. for a declaration as to what are "works of necessity" for railways under the Lord's Day Act. The Dominion Parliament at its recent session voted $13,000 for the maintenance and operation of the Board, exclusive of an amount of $25,000 authorized by statute.

National Transcontinental Ry. Contracts.—A press report states that a contract has been awarded to O'Brien and MacDougall, Ottawa, for the construction of a section of the line between Lake Superior Junction and Nipigon, 150 miles. Among the sections for which tenders were recently invited were: from the western end of Fauquier Bros.' contract north of Lake Nipigon, Ont., westerly to Dog Lake, about 126 miles; and from Dog Lake to mile 2.6 west of Peninsula Crossing, by alternative routes, 23.76 miles by the northerly and 24.13 by the southerly route, and it is evidently to these two sections the report refers.

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MAINLY ABOUT PEOPLE.

R. Bickerdike, M.P., sailed on the s.s. Canada, Aug. 1, from Montreal, on a trip to Europe.

J. Powell, Chief Draughtsman G.T.R., Montreal, sailed for Great Britain recently for a short vacation.

Sir Thos. G. Shaughnessy returned to Montreal, Aug. 20, from St. Andrew's, N.B., where he had spent a fortnight's holidays.

W. D. Robb, Superintendent of Motive Power, G.T.R., and Mrs. Robb, have returned to Montreal, after a two months' trip to Europe.

J. E. Webb, Toronto, contractor for the St. Mary's and Western Ontario Ry., has made an assignment for the benefit of his creditors.

W. Downie, General Superintendent Atlantic Division, C.P.R., returned to St. John, N.B., July 28, from a trip to the Pacific Coast.

The engagement is announced of Miss K. Mackenzie, daughter of W. Mackenzie, President Canadian Northern Ry., to W. Beardmore, Toronto.

L. Dion, who for over twenty years was baggagemaster on the G.T.R. between Island Pond, Vt., and Montreal, died at Montreal, Aug. 8.

G. M. Bosworth, Fourth Vice-President G.T.R., went to Ogdensburg, N.Y., Aug. 7, to attend the funeral of his mother, who died there Aug. 9.

J. J. Hill, chairman of the directors Great Northern Ry., had one of his hands nearly torn off in the wheel of an automobile, at Grasston, Minn., Aug. 16.

H. G. Elliott, Assistant General Passenger Agent G.T.R., returned to Montreal, Aug. 5, from a trip to Australia and New Zealand for the benefit of his health.

H. C. Hammond, President Northern Navigation Co., underwent an operation for a serious affection of the throat, at his residence in Toronto, Aug. 21.

M. A. Rice, bridge construction foreman G. T. Pacific Ry., fell from a girder going up on a bridge near Portage la Prairie, Man., July 27, and was killed.

Miss M. S. Robson, daughter of W. T. Robson, C.P.R. Advertising Agent, died while on a visit to her grandfather, Col. Silvester, at Lindsay, Ont., Aug. 13.

W. Mackenzie, President Canadian Northern Ry., was one of the Canadian gentlemen presented to the King at the recent levee at Buckingham Palace, London, Eng.

Miss E. G. King, daughter of C. L. King, G.T.R. station agent at Kincardine, Ont., was married in Toronto, Aug. 5, to Rev. F. E. Powell, rector of Holy Trinity, Chesley, Ont.

F. Dane, one of the Commissioners of the Temiskaming and Northern Ontario Ry., received news, July 27, from Bangor, Ireland, of the death of his father, Wm. Dane.

A. O. R. Huddell was presented with an onyx clock by the treasury staff of the G.T.R., Montreal, Aug. 9, on retiring from the company's service. Mr. Huddell held the position of cashier.

I. Frost, foreman of the carpenter and pattern shop of the G.T.R., Toronto, was presented with a purse of gold by his fellow employes, Aug. 17, on the occasion of his leaving the company's service.

The sum of $1,666.66, equal to two months' salary, was voted as a gratuity to the widow of the late A. C. Killam, K.C., Chairman of the Board of Railway Commissioners, at the recent session of the Dominion Parliament.

J. L. Riel, engaged on the construction staff of the G.T. Pacific Ry., Winnipeg, Man., died in the hospital there July 31. He was only son of Louis Riel, the leader of risings in the Northwest in 1869 and 1885.

W. D. Reid, President Reid Newfoundland Co., returned to St. John's, Nfld., Aug. 7, after having spent some time in Montreal arranging the affairs of the company, consequent upon the death of Sir Robt. G. Reid.

J. D. Robb, formerly in the Intercolonial Ry. service, and latterly engaged with E. A. Walberg, on the contract for erection of the Intercolonial Ry. shops at Moncton, N.B., died in the hospital there recently.

R. W. Leonard, C.E., has offered to erect a hospital for consumptives at St. Catharines, Ont., on condition that the Daughters of the Empire will provide the equipment and work out a plan for its maintenance.

A. J. Bailey, formerly Superintendent G.T.R. Bridge and Building Department, Stratford, Ont., died there Aug. 14, aged 74. Mr. Bailey, who had been for over forty years in the G.T.R. service, retired from active work in 1896.

Guy Tombs, General Freight and Passenger Agent Canadian Northern Quebec Ry., and Quebec and Lake St. John Ry., left Montreal Aug. 7 on a trip over the Canadian Northern Ry. lines in Ontario and the Prairie provinces.

J. H. Mathers, Locomotive Foreman, C.P.R. shops, Crow's Nest, B.C., was presented with an address and a purse of gold, Aug. 14, by his fellow-employes, on resigning his position, to take service with another company in the U.S.

D. McNicoll, Vice-President C.P.R., returned to Montreal July 31, after a two months' holiday trip through England and Scotland. He was accompanied from Liverpool by A. Piers, the manager of the company's steamship lines.

R. Newton, the C.P.R. brakeman who was sentenced to nine months' imprisonment for negligence, causing a collision at Guelph Junction, Ont., in April, was released from Milton jail, Aug. 5, on order of the Department of Justice, Ottawa.

M. J. Butler, Deputy Minister and Chief Engineer Department of Railways and Canals, returned to Ottawa, Aug. 5, after having been absent for some weeks for the benefit of his health. He was accompanied by Mrs. Butler and his two daughters.

V. Pelletier, engaged on the staff of the Intercolonial Ry.'s City Passenger Agent, Montreal, will, it is reported, be appointed aide-de-camp to his uncle, Sir C. A. P. Pelletier, on the latter's accession to the office of Lieut.-Governor of Quebec, early in Sept.

W. E. Davis, Passenger Traffic Manager G.T.R., who has also been appointed Passenger Traffic Manager G.T. Pacific Ry., was appointed to that position on the G.T.R., May 1, 1900, prior to which he had been successively Assistant General Passenger Agent, and General Passenger Agent, same road.

R. R. Jamieson, General Superintendent Central Division C.P.R., Winnipeg, Man., accompanied by his family, spent a few days at Westover, near Galt, Ont., early in August, at the residence of his father and mother, who celebrated the sixtieth anniversary of their wedding during the winter.

D. N. Stanton, railway contractor, who died recently in New York, aged 81, constructed some sections of the G.T.R., and was a promoter of the old Canada Atlantic Ry., which was acquired by J. R. Booth, of Ottawa, and amalgamated with the Ottawa, Arnprior and Parry Sound Ry., as the Canada Atlantic Ry.

Jas. Hunter, Assistant Deputy Minister Department of Public Works, will shortly receive the appointment of Deputy Minister, succeeding the late F. Gelinas, and A. St. Laurent, who was engineer in charge of the survey of the route of the projected Georgian Bay canal for the Government, will be given the position of Assistant Deputy Minister.

M. Talbot, who has been appointed Vice-President and General Manager of the Alaska-Pacific Steamship Co., Seattle, Wash., is a native of Wyton, Middlesex County, Ont., and commenced his career as a railway and transportation officer in London, Ont., about 25 years ago. Latterly he has been General Manager of the Columbia Northern Ry., and of the Portland and Astoria Navigation Co., with office at Portland, Ore.

Among the guests at the official dinner given by the Prince of Wales on board the warship Exmouth at Quebec, July 29, were Sir G. Drummond, Sir H. M. Allan, Hon. G. P. Graham, Hon. Jas. Dunsmuir, Hon. L. P. Brodeur, Rear-Admiral Kingsmill, and the Earl of Ranfurly. The latter is an Irish nobleman, and is President of the Atlantic, Quebec and Western Ry.

John Proctor, of Hamilton, Ont., died at his Scottish residence, where he usually spent the summer, Aug. 18. For many years he was engaged in the railway supply business, and was also identified with the promotion of the Wellington, Grey and Bruce Ry., and the Hamilton Northwestern Ry., as well as with the marine interests of Hamilton. One of his sons, Charles, is Travelling Passenger Agent G.T.R., with headquarters at Toronto.

W. S. Tilston, who has recently been appointed Chief of the Montreal Board of Trade Transportation Bureau, was born in Manchester, Eng., April 14, 1877. He entered railway service in 1889, in the office of the Division Freight Agent G.T.R., Toronto, and served there as Secretary, Rate Clerk, and Chief Clerk, to Oct. 1, 1906, when he was appointed Chief Clerk Import Freight Agent's office, C.P.R., Montreal, which position he held up to the date of his present appointment.

A young man who stated that he was a son of Sir Thos. G. Shaughnessy, President C.P.R., made an attempt to commit suicide at Seattle, Wash., July 30, in connection with his arrest for uttering a forged cheque for $10,000 at North Yakima, and for robbing a drunken man some time previously at Spokane. About five years ago a young man victimized a number of hotels and business people in the state of Washington, by means of forged cheques, and by his representation that he was a son or nephew of one or other of the officers of the C.P.R.

G. T. Bell, General Passenger and Ticket Agent G.T.R., who has also been appointed to a similar position on the G.T. Pacific Ry., was born at Montreal Sept. 7, 1861. He entered railway service in 1878, since which he has been consecutively: 1878 to Nov., 1880, clerk Car Mileage Office, Great Western Ry.; Nov., 1880, to Nov., 1882, stenographer to General Passenger Agent and Rate Clerk, same line; Nov., 1882, to 1884, chief clerk to Assistant General Passenger Agent G.T.R.; Jan. 1, 1884, to April 25, 1892, chief clerk to General Passenger Agent; April 25, 1892, to April, 1896, Assistant General Passenger Agent at Montreal; April, 1896, to August, 1899, Assistant General Passenger and Ticket Agent at Montreal; Aug., 1899, to May, 1900, First Assistant General Passenger and Ticket Agent at Chicago; May, 1900, General Passenger and Ticket Agent at Montreal.

J. E. Quick, General Baggage Agent G.T.R., who has also been appointed General Baggage Agent G.T. Pacific Ry., was born July 10, 1851, at Richmond, N.Y., and entered railway service in 1871, since when

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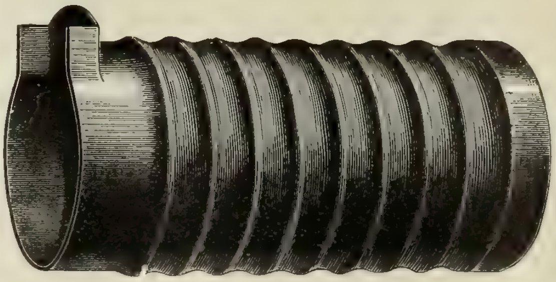

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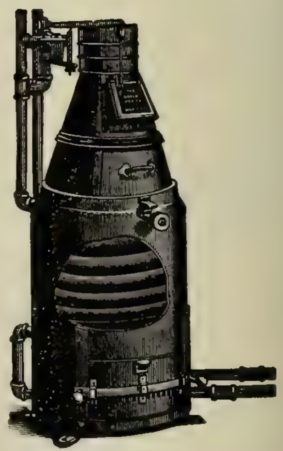

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he has been consecutively: 1871 to 1874, baggagemaster and supply clerk, Port Huron and Lake Michigan Ry., now part of the G.T.R. system; 1874 to 1876, General Baggage Agent and Ticket Clerk, same road; 1876 to 1884, Agent, Port Huron, Mich., and General Baggage Agent, Chicago and Grand Trunk Ry.; 1884 to April 15, 1896, General Baggage Agent same road and Detroit, Grand Haven and Milwaukee Ry.; April 15, 1896, to date, General Baggage Agent G.T. Ry. system, with headquarters at Toronto. Mr. Quick has been secretary of the American Association of General Baggage Agents since 1885.

D. McNicoll, Vice-President and General Manager C.P.R., completed his 42nd year of railway service Aug. 20. He was born at Arbroath, Scotland, April 7, 1852, and entered the North British Ry. service Aug. 20, 1866, since when he has been consecutively, to 1873, clerk Goods Manager's office, North British Ry., in Scotland; 1873 to 1874, similar position with the Midland Ry. in England; 1874, billing clerk Northern Ry. of Canada, at Collingwood, Ont.; 1874 to 1881, chief clerk in office of General Manager, Toronto, Grey and Bruce Ry.; 1882 to 1883, General Freight and Passenger Agent, same road; 1883 to 1889, General Passenger Agent Eastern and Ontario Division C.P.R.; 1889 to Jan., 1896, General Passenger Agent all lines and steamships, C.P.R.; Jan., 1896, to April, 1899, Passenger Traffic Manager C.P.R.; April, 1899, to April, 1900, Assistant General Manager C.P.R.; April, 1900, to Dec., 1903, 2nd Vice-President and General Manager C.P.R.; in 1903 he was elected a director and Dec., 1903, Vice-President of the company, while he was also elected a member of the Executive Committee, Oct. 3, 1906.

Capt. Thos. Donnelly, Secretary of the Donnelly Wrecking and Salvage Co., Ltd., Kingston, Ont., who died there Aug. 24, was born at Garden Island, Ont., Dec. 27, 1856. He entered marine life at an early age, and went through a course at White's Naval School, Bristol, Eng., subsequently obtaining a British Master's certificate, and at the age of 21 was captain of the schooner Prussia, operating across the Atlantic Ocean. Among appointments which he held are: Government Inspector of Hulls, Government Examiner of Masters and Mates, Chief Inspector for Inland Lloyds and the Bureau Veritas. He was also interested in the organization of the Canadian Lake and Ocean Navigation Co., of which he was the first Superintendent. Later he became Secretary of the Donnelly Wrecking and Salvage Co., with which his father and brother were associated, and which has accomplished several of the largest and most difficult salvage operations on the continent. He took an active part in the proceedings of the Dominion Marine Association. He is survived by a widow and four children, and a brother, John, who conducts the operations of the Donnelly Co.

C. A. Cotterell, whose appointment as Chief Train Dispatcher, District 5, Central Division, C.P.R., was announced in our Aug. issue, was born at Enden, Eng., Jan. 18, 1877, and came to Canada at an early age, where he was educated. He entered railway service as messenger boy C.P.R., Windsor St. station, Montreal, June, 1888, and served there in various capacities until Feb., 1894, since when he has been: Feb. to Apr., 1894, night operator C.P.R., St. Constant, Que.; Apr., 1894, to July, 1896, Station Agent same road, East Richford, Vt.; July, 1896, to July, 1898, Operator and Agent, successively at Montreal Jct., Farnham, St. John's, Westmount, Windsor St. station, Montreal, and other points, same road; July, 1898, to Feb., 1901, Dispatcher C.P.R. Crow's Nest branch, successively at McLeod, Alta., and Cranbrook, B.C., also agent at McLeod, Alta., Cranbrook and Fernie, B.C.; Feb., 1901, to Aug., 1903, Dispatcher and Acting Chief Dispatcher C.P.R., Fort William, Ont.; Aug., 1903, to Apr., 1904, Chief Dispatcher C.P.R., Regina, Sask.; Apr., 1904, to Sept., 1906, Dispatcher and subsequently Chief Dispatcher C.P.R., Fort William, Ont.; Sept., 1906, to May, 1908, Chief Dispatcher Great Northern Ry., U.S., at Spokane, Wash.; May to June 25, 1908, General Foreman C.P.R., Plunkett Pit.

W. H. Grant, whose portrait appears on the first page of this issue, was born at Acton, Ont., Dec. 8, 1858. He commenced railway construction work with D. D. Mann in 1882, and with the exception of eight years which he spent in Winnipeg, Calgary, and British Columbia, he has since been continuously employed in railway work, first with Mr. Mann, and later with Mackenzie, Mann & Co. During this time he has acted as accountant, superintendent and Manager of Construction. He was with Mr. Mann on the latter's contracts on the C.P.R. main line on the prairies and in the British Columbia mountains, and constructed 75 miles of the main line of the old Manitoba and Northwestern Ry., and the Russell and Rapid City branches. He laid the track on the 40 miles of the old Winnipeg and Hudson Bay Ry., and had charge of one section of Mackenzie & Mann's contracts on the C.P.R. short line through Maine. During the construction of the Ontario and Rainy River Ry. he was superintendent of the grading and bridging from Port Arthur to Fort Frances. After the completion of that line in 1902 he was sent to Nova Scotia, where he constructed 247 miles of line, which is now comprised in the Halifax and Southwestern Ry. In 1907 he was appointed Manager of Construction for Mackenzie, Mann & Co.'s lines east of Port Arthur, with headquarters in Toronto. Altogether he has had charge of the construction of 680 miles of that company's system.

The Imperial service medal has been granted to the following retired employes of the Intercolonial Ry., in recognition of long and meritorious service: John Adams, tankman; John Aiken, Jean Forgues, switchmen; R. Anderson, F. Demers, J. Donahoe, A. H. McDonald, M. McDonald, J. Ouellet, trackmen; F. Archibald, I. Devault, P. Thibideau, fitters; P. Ashe, H. Brown, J. Christal, C. B. Dunham, J. Ennis, T. King, J. Mason, J. Millman, section foremen; A. Barbeau, T. Buchanan, T. Carson, C. C. Davison, E. Gamache, T. McLean, J. F. Sayre, foremen; W. H. Bell, A. McKelvie, car inspectors; J. Brown, A. Clements, J. McDonald, G. T-Mellish, W. Pickering, R. A. Steeves, carpenters; W. Bulmer, J. Fogarty, W. Hayden, machinists; J. W. Cole, J. McArthur, J. McDowell, J. H. Moore, T. W. Prince, A. Shickle, M. Tobin, enginemen; G. Collard, G. Murdock, brakemen; C. Davey, A. Fitzpatrick, sectionmen; D. Driscoll, P. Driscoll, J. McAnulty, D. McDonald, M. Morrison, E. P. Shaw, porters; Eliza Flanagan, charwoman; J. Forbes, baggageman; A. Fraser, J. E. Gooldrup, blacksmiths; J. Gillard, T. Hogan, M. Jones, watchmen; J. Good, upholsterer; W. Grant, laborer; I. B. Humphrey, H. Palmer, E. St. Onge, stationmasters; W. Kelly, J. Millican, A. Rainnie, conductors; G. Langlois, car oiler; P. P. LeBlanc, painter's assistant; A. McDonald, crossing watchman; A. Madore, car repairer; J. H. Magee, tinsmith; J. Morgan, freight porter; E. L. Perkins, storekeeper; E. Price, toolkeeper; R. M. Scott, rest-room keeper; I. G. Stevens, policeman; P. Sullivan, car cleaner.

M. H. Folger, who died at Kingston, Ont., Aug. 15, was born at Cape Vincent, N.Y., Mar. 22, 1841, and went to Kingston in 1863. He was connected with a number of transportation and industrial companies, and his well-known integrity, keen insight and business acumen made him much sought after by commercial men on both sides of the boundary. Of the companies with which he was more intimately connected are the St. Lawrence River Steamboat Co., and the Thousand Islands Steamboat Co., the Kingston Light, Heat and Power Co., the Kingston and Pembroke Ry. Co., and the Kingston, Portsmouth and Cataraqui Electric Ry. Co. The late Mr. Folger and his brother were the chief promoters of the Kingston and Pembroke Ry., now a part of the C.P.R. system, and in the construction days though, owing to the difficulties encountered, eight contractors, one after another, either failed or withdrew from the contract, they were not deterred, but placed the contract with Chisholm, McDonald & O'Brien, who eventually carried out the work successfully. In recent years Mr. Folger gradually retired from active participation in the management of the various concerns in which he was interested, but retained up to the time of his death, the presidency of the St. Lawrence River and Thousand Islands Steamboat Cos., in addition to which he acted as U.S. Vice-Consul for the Kingston District. He is survived by three sons, two of whom, connected with the marine interests, Howard being the General Manager St. Lawrence River Steamboat Co., and the Thousand Islands Steamboat Co., and Benjamin W., being Manager Niagara Navigation Co., Toronto.

General Passenger Agents' Convention.

The 33rd annual convention of the American Association of General Passenger and Ticket Agents will open in Toronto Sept. 22, at 11 a.m. After routine business reports will be presented from various committees, etc., and there will be reports from co-operating associations, including the Canadian Ticket Agents' Association, which will be represented by W. Jackson, C.P.R. Ticket Agent, Clinton, Ont. C. F. Bielman, Traffic Manager White Star Line, Detroit, Mich., will give an address on "Passenger Carrying Lake and River Lines of North America," and S. Moody, General Passenger Agent Pennsylvania Lines west of Pittsburg, will also give an address.

A local committee, of which B. W. Folger, Manager of the Niagara Navigation Co., is chairman, has arranged an entertainment programme as follows: Sept. 22, Addresses of welcome by the Dominion Minister of Railways, the Premier of Ontario, and the Mayor of Toronto; 4 p.m., automobile ride round city as guests of the city; 8 p.m., dinner for members of the Association tendered by Canadian National Exhibition Association; 8.15 p.m., theatre party for ladies at Royal Alexandra Theatre. Sept. 23, 11 a.m., street car ride round town for the ladies, arranged by the terminal transportation lines of Toronto; 4 p.m., sail around harbor and tea at Royal Canadian Yacht Club; 8 p.m., theatre party for all at Shea's Theatre.

Two special trains will be run, one from New York via Lehigh Valley and G.T.R., the other from Chicago, via G.T.R. On the night of Sept. 23, the members and their ladies will leave as the guests of the G.T.R. to spend a couple of days at Lake of Bays and Timagami.

Temiscouata Ry.—Traffic receipts for July, $22,717.80. Total receipts for 7 months ended July 31, $123,327.26.

The Canadian Ticket Agents' Association will hold its annual outing at Detroit, Mich., Oct. 6-8. The headquarters will be at the Hotel Cadillac, where the business meeting will be held Oct. 6. On the evening of that day, instead of the usual dinner, there will be a Dutch luncheon with vaudeville, etc., and the ladies will be given a theatre party. A programme of entertainment and excursions is being arranged for the other two days.

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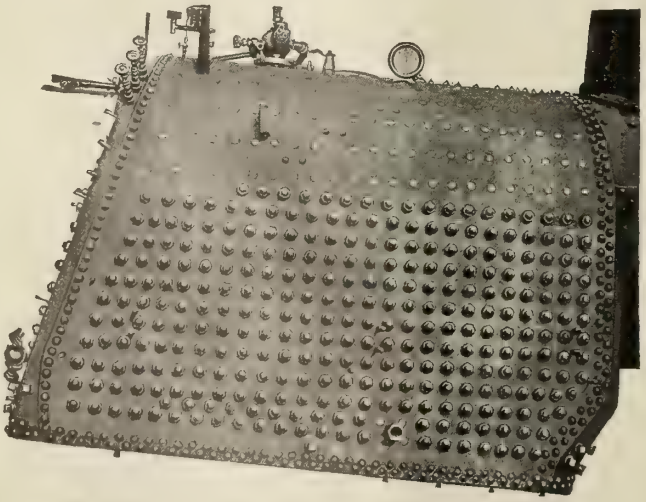

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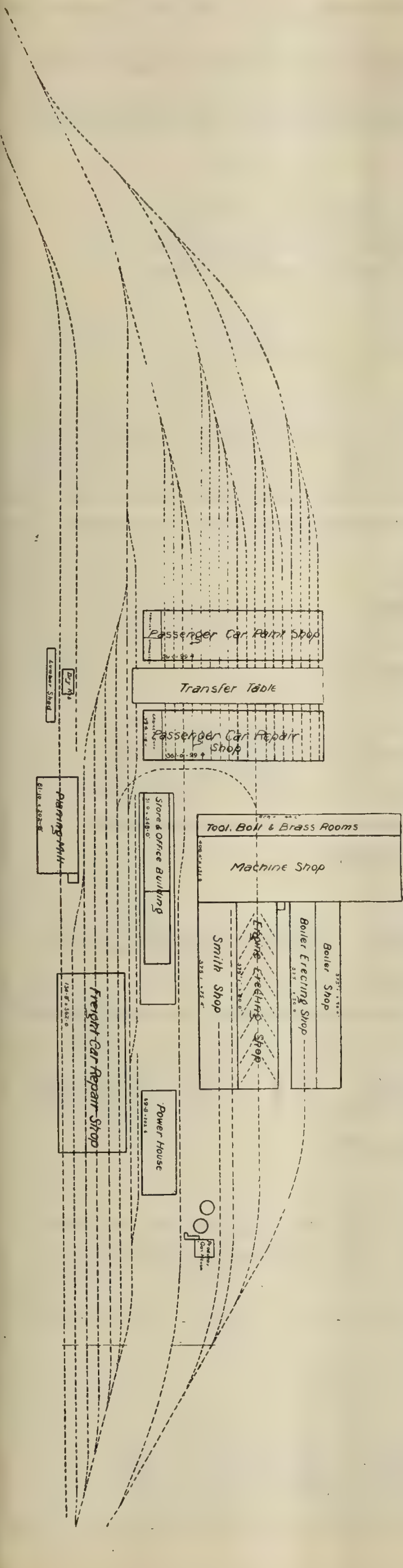

The Intercolonial Railway Shops.

By C. F. Bristol, Stud. Can. Soc. C. E.

The new I.C.R. shops are located about a mile from Moncton station, on the main line to Montreal. The site is on a plateau, about 60′ above sea level, and although nearly flat, slopes gently to the southward in the direction of a small creek. As shown on the plan, two main sidings, with numerous branches and spurs, facilitate shunting and render ready access to all buildings and yards. The two passenger car shops are long and narrow, and so designed that cars may be placed transversely in each shop. These two buildings are parallel to each other and at right angles to the main line, with 18 tracks in each. Cars may be readily transferred from any track in one shop to any track in the other by means of the electric transfer table between the two shops. The stores and office building, power house, producer gas house, freight car shop, planing mill, lumber shed, and dry kiln are all laid out parallel to the main line of the railway, and are all served by side tracks. The planing mill is situated convenient to the passenger car shop and freight car shop. The locomotive shops comprise the machine shop and annex, boiler shop, boiler erecting shop, engine erecting shop, and smith shop, all under one roof. The four latter shops are parallel to the main line, but at right angles to the machine shop.

A notable feature in connection with the engine erecting shop is the arrangement of the pits. The main pit runs almost the entire length of the shop, while the track is continued across the machine and passenger car shops into the paint shop, where locomotives may be painted should the erecting shop be crowded. The side pits are all laid at an oblique angle to the main pit, and this arrangement provides greater facilities for stripping and repairing engines.

The foundations rest on firm, dry, red clay. The pressure on the clay under the column footings and foundations was not allowed to exceed three tons per sq. ft. The foundations are of 1-3-5 concrete, with a 6″ batter on each face, and wherever the load is concentrated, as in the case of side columns, the width of the foundation is increased proportionately. The column footings are in the form of truncated pyramids.

The Freight Car Shop is 134′ 8″ by 362′. Two rows of columns divide the shop into three bays, each 44′ wide, and each containing two tracks through the entire length of the shop. In addition to these there are several narrow gauge tracks for small trucks. The first wall course is 4′ high by 24″ thick on the ends, and 12″ on the sides, this being increased to 20″ at the side columns or pilasters. The upper outside edge of this first course has a 4″ bevel running completely around the building. Expansion joints divide the wall into sections of 40′. On the sides, with 20′ centres, extending from the first wall course to the roof, are the concrete pilasters, 4′ 8″ wide and 16″ thick, with a small projection on each side which serves as a casing for the window frames. The space between the pilasters is entirely glass, except a strip 2′ 3″ wide, which is made up of 2″ x 4″ spruce studding, covered on both sides with expanded metal lath and plastered with Portland cement mortar.

In each end are six doors, 12′ wide by 16′ high, and above the doors the walls are only 12″ thick, with the exception of the lintels, which are 6″ thick and 8′ high. The reinforcement in the lintels consists of horizontal steel rods laid 18″ centre to centre, and vertical rods, with 2′ centres, extending into the cornice. Each alternate row of horizontal rods through the lintels is carried completely across the building. A number of vertical rods is also run up in the concrete about 2″ from the sides of the windows, in the ends of the monitor, and also in the thin portion of the wall at each side of the doors, where recesses are left for the door frames. The centre columns are made up of two 8″ channels held together by riveted lattice work, while steel trusses support the roof and form the monitor. The ends of each row of purlins are firmly imbedded in the end walls, while the two outside rows are completely imbedded in the concrete cornice. The outside vertical members of the trusses and monitor are imbedded in the concrete pilaster. The outside purlins surrounded by the concrete cornice serve as a very efficient reinforcement, but small bent rods of steel were also placed near the face of the cornice three feet apart. The roof slab consists of cinder concrete, 1-2-4 mix. The slab forms a knee on each side of the I beam purlins, and completely covers the upper flange and half of the web, thus giving them lateral support. The reinforcement in the roof slab is electrically-welded wire cloth, 10″ x 4″ mesh. The transverse wires are about ⅜″ diameter, and the longitudinal wires about ⅛″ diameter. This reinforcement is arranged so as to come ½″ from the bottom of the slab at the centre of the span between the purlins, and ½″ from the top of the slab at a point over the purlins. The bottom plane of the concrete slab is ½″ below the plane of the top flanges of the purlins. A thin layer of cement mortar is spread over the cinder slab to cover up the sharp projections, and over this a thin layer of pitch. Three plys of roofing felt are laid longitudinally, then hot pitch poured thereon, and the whole covered with a layer of gravel. At the edge of the roof the felt is well nailed to wooden strips imbedded in the cornice. The weight of the gravel and the adhesion of the pitch securely hold the felt to the roof, and obviate the use of transverse nailing strips. The monitor, 44′ wide and 8′ high, with continuous side lights, pivoted, extends the full length of the shop. The vertical members of the monitor truss are imbedded in small concrete columns similar in shape to the large side columns. Two rows of skylights on each side of the roof, with galvanized iron frame, on a 6″ concrete wall 2′ high, furnish additional light.

The planing mill is 81′ 10″ x 202′ 8″, and is constructed practically the same as the freight car repair shop, except that outside steel columns are imbedded in concrete side columns, and that the monitor only comes within twenty feet of the ends of the building. Hence, the trusses at these points were designed to carry the monitor end walls. The steel columns were set up first and well guyed, then the trusses were riveted in position and the purlins laid. No anchor bolts were used to hold the columns, as the forms were built around them to form the concrete pilaster. The cornice forms were next placed, and the column and cornice forms were filled with concrete in one operation.

The Passenger Car and Paint Shops are each 361′ 8″ x 100′. The cabinet shop is elevated half a story in one end of the passenger car shop, on what is termed the mezzanine floor. In the car paint shop, on a similar floor, are the upholstery and varnish rooms. These buildings are constructed entirely of reinforced concrete, and being exactly similar, the same forms were used for both. The column footings are built independently of the columns, and have ⅜″ square steel rods, 3′ long, projecting about 18″ above the top, thus giving a firm bond between the footings and the

(Continued on page 653.)

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TORONTO, CANADA, SEPTEMBER, 1908

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INTERCOLONIAL RAILWAY

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"Fishing and Hunting" "Moose in the Micmac Country"

The Intercolonial Railway Shops.

(*Continued from page* 649)

FREIGHT CAR REPAIR SHOP, INTERCOLONIAL RY., MONCTON, N.B.

columns. The columns are 14″ square, with chamfered corners and knee braced at the girder connections. Eight twisted steel bars, four of which are ⅝″ square, and four ⅜″ square, arranged alternately and spaced equidistant in a circle, are enclosed in a helix of 4″ pitch and 10″ diameter, formed by a ½″ x ⅛″ steel band, the whole reinforcement extending from end to end of the column. The bars and helix are wired together at the intersections, resulting in a very strong and neat reinforcement.

In the first wall course, which is 16″ thick, with the upper outside edge bevelled, both horizontal and vertical reinforcement is used, consisting of ⅜″ square steel rods. The vertical rods project about 6″, ensuring a firm bond with the next course. The balance of the wall is 12″ thick, and is almost all in the form of wall columns, with interstices for windows and doors, 60% of the wall area being of glass. The reinforcement in these wall columns consists of ⅜″ round and ½″ square bars, placed horizontally and vertically, and all wired together to form a coarse mesh. The window lintels, 6″ thick by 2′ high and 12′ long, have two ⅝″ square twisted steel bars 20′ long laid near the bottom, and two ⅜″ round bars each 20′ long, one in the centre and the other near the top. These bars extend 4′ each way into the side wall columns so that they are securely fixed. The door lintels are smaller, but of practically the same construction.

The mezzanine floor in the south end of each building is supported by a transverse girder resting on four columns, and a number of secondary beams at right angles to the girder. The secondary beams are carried by the transverse girder and the end wall columns, while the 4″ floor slab is taken as the flange of the beams. ⅝″ square twisted steel bars, 20′ long, and laid with 12″ centres, constitute the slab reinforcement, and are placed about ½″ above the bottom of the slab. The reinforcement in the beams and girder is similar to that used in the roof girders and beams described below.

The roof is carried by six longitudinal rows of columns, including the side wall columns. The rows of columns are 20′ between centres, while the columns in each row are 18′ apart, centre to centre. Each transverse row of columns carries a continuous roof girder, and the girders carry secondary beams spaced 6′ 4″ apart and at right angles to the girders. The 3″ roof slab rests on the top of the beams and girders, and is figured as one piece with them, serving as the flange. Where the continuity of the secondary beams running longitudinally is broken by openings for the skylights, the beams project about 2′ 6″ from the girder in the form of short cantilevers, which support the skylight walls.

The concrete for the foundation, column footings and lower portions of the wall was mixed in the proportion of one part of cement, two of sand, and six of gravel; for the interior columns, there was used one part cement, one part sand, and four parts gravel, which had to pass a ¾″ screen, but five parts of gravel were used for the wall columns, beams, girders, and roof slab. A richer concrete was used in the centre columns in order to give the greater strength necessary. All the concrete was "wet mix" and thoroughly tamped. The tamping rod consisted of a piece of gas pipe, in one end of which a thin steel blade about 5″ wide was welded. This blade was always shoved down into the concrete, close to the form. By this means all the stones in the concrete were pushed back from the faces of the forms, permitting the fine sand, etc., to form the outside surface. This tamping always resulted in uniform smooth surfaces when well done. Of course, the 3″ roof slab could not be tamped in this way, but it was well stirred by the shovels and straight edges run over the surface and the rough places smoothed off with a float. The reinforcement in the girders consists of four twisted steel bars ¾″ square, extending across the span between each pair of columns and lapping about 1′ with the reinforcement in the next span. Six ⅜″ square stirrups were wired to the four twisted bars at each end, so that the complete reinforcement for each span could be easily handled and laid in position in one piece. In the secondary beams, the reinforcement is made up of three ⅝″ square twisted steel bars and wired together with the stirrups. At an angle of 45° two ⅝″ square twisted bars 5′ long are thrust down into the knee brace on each side of the column, while three ⅞″ square twisted rods are laid in the slab over each column. The slab reinforcement on the passenger car shop consists of no. 10 gauge 3″ mesh expanded metal, while on the passenger car paint shop ⅜″ square twisted rods are laid transversely with 12″ centres.

The forms for the walls, side columns, etc., employed in the construction of these buildings consists of 1¾″ t. and g. spruce boards, planed on one side, and strongly bound together by means of 3″ x 6″ cleats spaced about 24″ centres. The outside and inside forms are held together by ⅝″ bolts

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and kept equidistant by either wooden or concrete spacers. The wooden spacers were knocked out and thrown aside as the concrete was brought up to their level. Oblique timbers, for additional bracing, were also used. The centre column forms were constructed on the same principle, i.e., 1¾″ t. and g. lumber held together by cleats, and the cleats on each side being bolted to one another. The side pieces were kept apart by long bulkheads, which formed the other two sides. The moulds for the girders and beams were made up of 1¾″ t. and g. boards. Openings were cut in the sides of the girder forms to receive the secondary beam forms, while cleats and cross-bar formed a yoke to support the form. The secondary beam forms, in addition to the sides and bottom pieces, had longitudinal carrying pieces, which were nailed to the vertical cleats to carry the roof panel joists. The box forming the knee brace was fastened on to the column form at cross pieces by means of four uprights. Each pair of these uprights was held in position by a bolt running through the column. Two transverse rows of wall and centre column forms were first set up, levelled and braced in position, without lining up. Then the knee brace boxes were dropped into place and fastened to the four uprights with a few nails. The columns and boxes being then in one piece the girder sides were dropped into position, cleats fitting up tight to the sloping bottom of knee brace. When the girder bottom was dropped into position it acted as the spacer to the two side forms, while the secondary beam forms, when dropped into place, acted as side braces. The joists for carrying the roof panels were next put in place across the carrying pieces on the secondary beams and nailed. Finally, the roof panels, which were composed of 1″ t. and g. stuff, were laid over the joists. Forms for half of the building, plus one extra panel, were made up, and when completely put together, the whole was lined and levelled. The extra panel was left up when the shift from north half to south half was made, in order to fasten the forms after the first shift.

STORES AND OFFICE BUILDING. The first floor and basement of the stores and office building is intended for the local and general stores department, and the second story, over the western half, will be utilized for the offices of the stores department and Superintendent of Motive Power. An exterior wall, 9′ from the sides of the building and about 4½′ above ground, supports a reinforced concrete slab platform along the sides of the building. The platform is also continued out 25′ on the east end with a ramp for trucks on each side. The reinforcement in this platform slab is made up of ⅜″ square twisted bars 9′ 5″ long and 5″ centres, laid transversely, and ⅜″ round bars 18″ centre to centre, longitudinally. In addition to this the outside edge is protected by a 4″ x 6″ steel angle. The reinforcement in the exterior and interior walls, forming the first course above the foundation, consists of ⅜″ round horizontal rods 12″ centres, and ⅜″ square vertical rods 3′ centre to centre, projecting above the floor level. These rods are all wired together forming a coarse mesh, and are expected to overcome cracking from the expansion and contraction of the concrete. The pedestals supporting the columns have eighteen ¾″ square twisted bars, 4′ 8″ long, laid "criss-cross" nine each way, about 4″ from the bottom. Also two ½″ square bars project about 9″ above the basement floor line to ensure a firm bond with the base of the columns. The columns supporting the floors and roof are square with bevelled corners, and the reinforcement consists of eight vertical rods set equidistant in a circle, with ½″ x ⅛″ flat steel band wired to the vertical bars in the form of a spiral of 3″ pitch.

The floors are of all concrete construction in the form of slabs stiffened by ribs. These ribs are a series of heavy transverse girders resting on the centre and wall columns, and a similar series of secondary beams at right angles to, and supported by the main or transverse girders. The floor slabs, with the girders and beams supporting them, are moulded in place in one piece. Twisted square bar reinforcement is used altogether for the floors, girders, and beams. The tension bars in the transverse girders on the first floor consist of six 1″ square twisted bars, while in the secondary beams only five ¾″ square twisted bars are used. Five 1″ square bars in the girders and four ¾″ bars in the secondary beams comprise the tension bars for the second floor. In the roof, five ⅝″ bars in the girders and four ½″ bars in the secondary beams form the reinforcement. All tension bars in the floor and roof ribs are tightly wired to the stirrups and were generally made up as shown in illustration opposite.

The forms for this building were made on the same principle as those described under passenger car shops. Forms were made up for half of the first floor, plus an extra panel. The first floor was moulded in two shifts, and the second floor over half of the building in the third shift. For the roof the same girder and beam forms were used, but tilted up, and the increased length was obtained by increasing the length of the forms by means of wedges, and finished in two shifts in like manner. New column forms, however, had to be made each time, as the columns for the different floors diminished in size and increased in length for the upper portions of the building. The same panels were used each shift for the different floors and roof, although considerable repairing and patching was found necessary, due to shrinkage, rough usage, etc. Both the storeroom and office floors are finished with ⅞″ t. & g. hardwood flooring, fastened to 3″ x 2″ nailing strips spaced 16″ centres, and laid transversely to the building, the intervening space between the floor slab and hardwood flooring being filled with fine dry ashes.

A slag cement was used in all the concrete below the ground line. The important factor in favor of this cement, from a contractor's standpoint, was that it cost about $1 a barrel less than the Portland cement, f.o.b. cars Moncton. An average taken from a month's tests is as follows: Assuming 500 lbs. per sq. in. as the standard tensile strength of a good Portland cement, this slag cement gave an average result of about 58% at 7 days and at 28 days about 85% of the standard, although some individual tests ran very close to the 500 lbs. per sq. in. When given a longer period than 28 days in which to set the tensile strength indicates a still greater increase, but for want of time very few tests were made on briquettes over 28 days old. Where a large amount of concrete work is being carried on it is a question whether the use of this cement is economical, as it is slow in setting, thereby retarding the progress of taking down and setting up forms. In several instances, during cold, damp weather, this cement took six days to set.

In the floors and roofs of these large reinforced concrete buildings, the transverse girders are all continuous. The concrete was deposited transversely to the building, but as strips of only 40′ to 50′ could be laid in a day, numerous joints necessarily occurred in the secondary beams. In making these joints, the system followed was of great importance, as the efficiency of the beam depended on the position of the joint and the care with which it was made. The outer edge of each day's deposit terminated as nearly as possible at the points of counter-flexure in the secondary beams. A "wet mix" was used for this work, and the semi-fluid concrete was allowed to run into the trough or beam form, taking a sloping shape as the cement set. Each morning, before the mixers were started, the face of the joint was prepared as follows: The concrete was cut away slightly, and the surface of the joint was swept clean and sprinkled with water; finally, just before the first batch was deposited, the joint was coated with a thin grout. A joint made in the manner described above will give approximately 88% of the strength of a solid beam.

THE LOCOMOTIVE PLANT includes five shops, viz.: The machine shop, 131′ 6″ x 408′ x 36′ high, divided into two bays by a centre line of columns, each bay being served with an overhead electric travelling crane of ten tons capacity. This shop has an annex 44′ x 408′. The smith shop, at right angles to the machine shop, is 75′ x 375′ x 37′ high. Water gas will be used for the different furnaces. Jib cranes are to be placed conveniently near the several fires and furnaces, while a track through the centre of the shop permits the handling of heavy work by means of trucks. The engine erecting shop, separated from the smith shop by a partition, is 80′ x 375′ x 50′ high. Two 60-ton electric travelling cranes are to be installed for moving and placing locomotives. Through the centre runs a surface track with a shallow concrete pit. On each side of this central track are eight side tracks with pits arranged herring-bone style. These side tracks are designed to accommodate engines requiring heavy repairs, and this form of layout provides ample space for overhauling. This leaves the central track free for light repair work, and obviates the necessity of lifting one engine over another. Between the engine erecting shop and boiler shop walls is a space 25′ wide, which permits of additional side lights. The boiler shop is 100′ x 375′, divided into two bays by a row of columns down the centre. The bay intended for boiler erection is 44′ high, and the west end of it contains the riveting tower, 25′ long by 75′ high. A 35-ton electric travelling crane is to be installed in this bay, and a 30-ton crane in the riveting tower to serve the bull riveter. The tool bay is severed by means of a 10-ton electric travelling crane, which traverses the entire length of the shop. In addition to this, jib cranes are to be placed convenient to the different tools.

These buildings are of structural steel framing. The columns rest on concrete pedestals spaced 25′ centre to centre throughout. The side walls, for a distance of 5′ above the ground, are of concrete, and at each exterior column, extending up to the cornice, is concrete pilaster. The 6″ partitions between the various shops are of reinforced concrete. In the smith shop the ground is brought to grade and filled with selected filling, rolled, and rammed. The floor in the engine erecting shop consists of 3″ hemlock plank spiked to 4″ x 6″ sills, spaced 2′ 9″ centres, and resting upon a 4″ layer of concrete. The boiler shop has 3″ hemlock plank on 6″ x 6″ cedar sills laid 3′ apart, while in the machine shop 2″ hemlock plank is nailed to 3″ x 3″ nailing strips resting upon a 3½″ layer of concrete. The roof slab is composed of four inches of cinder concrete, reinforced by ⅜″ square twisted steel rods 12″ centre to centre. On the upper sides of all skylights situated on the slope of the roof, the slab is raised to form a cricket to shed water freely. Side lights comprise a large percentage of the outer wall area, while numerous skylights

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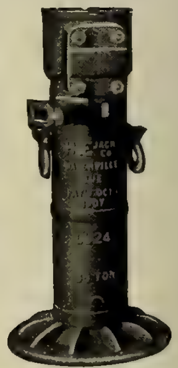

Plain

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supply additional light. The machine shop is well under way, but beyond the foundations, nothing has been done to the balance of the locomotive shops, which will not be completed for some months.

The Power House is built on the same principle as the planing mill, viz.: steel columns imbedded in concrete pilaster, and steel trusses to support the roof. The engine room and boiler room are each 69′ x 100′, and separated by a reinforced concrete wall. The floor in the engine room consists of ⅞″ maple flooring, overlying 2″ hemlock planks spiked to 3″ x 3″ nailing strips imbedded in a 3½″ layer of concrete. In the boiler room the floor is of tar macadam, laid on a 6″ course of gravel, well rammed and rolled. The boiler equipment consists of four Babcock & Wilcox water tube boilers of 250 h.p. each, arranged in two batteries, while the necessary space is reserved for a third battery. Fuel economizers, and a feed water heater and pump, are installed to take care of the feed water. An induced draft plant forms part of the equipment, also a 1,000-gallon u.w. pump. In this room, a fan, direct connected to an auxiliary engine, supplied the heat required in the freight car shop. The coal bins are arranged along the side of the building in front of the boilers.

The engine and generator equipment is as follows: Two horizontal double-acting gas engines, normal rating 500 b.h.p. each, adapted to drive two 300 k.w. direct-connected, sixty-cycle a.c. generators. These generators are three-phase, 1,500 r.p.m., and 220 volts. In addition to these machines there will be two 70 k.w.d.c. belt-driven generators of 250 volts and 875 r.p.m. The gas engines are driven by producer gas, which is to be manufactured in the producer gas house, situated near the power house. The gas for the furnaces in the smith shop will be water gas, also manufactured in the gas house. The gas generators will convert continuously about 1,000 lbs. of coal per hour, generating therefrom about 18 cu. ft. of water gas for the furnaces, and about 55 cu. ft. of producer gas for the engines.

The shops are heated by the hot blast system, using exhaust steam from the auxiliary engines and pumps, supplemented by live steam, from the boilers. Fans, direct connected with engines, force the hot air through concrete conduits, furnished with risers in the walls. These risers discharge close to the floor near the windows. The sewerage system is extensive, consisting of one main 2,800 feet long, emptying into a small creek which flows to the Petitcodiac River. This is a concrete pipe, egg section, 3½′ high by 3′ wide, with an 8″ wall. From the main sewer, branches, varying from 20″ to 6″ diameter, extend past the various shops to receive the drainage from the down pipes, porous tiles along the foundations, shop drains, etc. The two main branches consist of 20″ concrete pipe, while 12″ and 6″ vitrified clay pipes are used for the others. Wherever a line of pipe discharges into a branch or main sewer, concrete catch basins are provided.

The interior surface of the walls, concrete columns, and ceilings are painted with cold water paint, applied with a spraying machine, giving a very white finish, and increasing materially the brightness and lighting effect of the buildings. The steel columns and trusses are painted a dark red, while the window frames and doors are covered with a light drab paint.

For each roof the snow and wind load was estimated at the minimum of 20 lbs. per square foot, vertical load. The design is intended to facilitate the removal of snow by the wind, but in event of the snow load becoming twice as great as assumed, the increased unit stress in the steel would not be great. However, all of the roofs during construction were loaded beyond this minimum, showing no signs of injury to them.

The Construction Machinery or Plant consists of eight mixers, both yard and half-yard sizes, located convenient to the various buildings. Where the concrete had to be elevated, the mixer discharged into a bucket which was hoisted up an elevator and dumped automatically into a hopper, from which the mix could be taken by barrows. Both the mixers and hoisting machinery were driven by small donkey engines. Two gas engines were also used, one for twisting the steel and the other for pumping. Two derricks, with 60′ booms, and one with a 90′ boom, were used for steel erection, while a travelling yard crane, with a 40′ boom, was used for unloading and other purposes.

W. A. Bowden, of the Department of Railways and Canals, is the Designing Engineer of all these buildings. The economic handling of material between the various shops was the prime factor in determining their location in relation to each other, and they are so placed as to enable any shop to be enlarged without interfering with the future extension of any of the others.

The foregoing paper was read before the Canadian Society of Civil Engineers recently.

◆

Taxes Paid by Railways.

H. J. Pettypiece, ex-member of the Ontario Legislature, whose hobby is increased taxation of railways, has published the following statement of taxes paid by various railway companies for the year ended June 30, 1907:

Alberta Ry. and Irrigation Co	$ 3,355.95
Algoma Central and Hudson Bay	904.32
Bedlington and Nelson	1,291.04
Brandon, Saskatchewan, and Hudson Bay	1 350.00
Brockville, Westport, and Northwestern	5,813 20
Canada Southern	55,882.60
Canadian Pacific	677,322.99
Canadian Northern	34,464.27
Canadian Northern Ontario	858.84
Canadian Northern Quebec	10,870.91
Crow's Nest Southern	5,058.24
Central Ontario	3,156.50
Dominion Atlantic	828.90
Esquimalt and Nanaimo	2,070.27
G.T.R. in Canada	435,295.82
G T.R. (Canada Atlantic)	33,480.81
Halifax and Southwestern	25.00
Irondale, Bancroft, and Ottawa	155.81
Kaslo and Slocan	3,448.00
Kingston and Pembroke	2,957.68
Klondyke Mines	101.25
Lake Erie and Detroit River	24,245.20
Liverpool and Milton	20.56
Lotbiniere and Megantic	606.45
Maganetawan River	85.70
Manitoulin and North Shore	79.25
Massawippi Valley	1,946.56
Montreal and Atlantic	3,991.60
Montreal and Province Line	1,529.69
Montreal and Wilmont Junction	289.94
Morrissey, Fernie and Michel	521.91
Midland of Manitoba	1,350.00
Nelson and Fort Sheppard	5,691.78
New Westminster Southern	858.06
Ottawa and New York	1,422.80
Philipsburg Ry. and Quarry Co	60.00
Quebec, Montreal and Southern	1,708.23
Quebec and Lake St. John	8,503.76
Quebec Ry. Light and Power Co	14,049.14
Red Mountain	1,387.28
Stanstead, Shefford, and Chambly	291.65
St. Clair Tunnel	831.89
St. Lawrence and Adirondack	2,845.00
Temiskaming and Northern Ontario	393.37
Toronto, Hamilton, and Buffalo	4,130.73
Vancouver Victoria, and Eastern	6,277.67
Vancouver, Westminster, and Yukon	5,360.44
Victoria and Sydney	1,567.19
Victoria Terminal Ry. and Ferry Co	1,043.56

◆

Temiskaming and Northern Ontario Ry.—Gross earnings for June, $89,132.96; operating expenses, $58,559.92; net earnings, $30,573.04. Total earnings for six months ended June 30, $372,158.62. Approximate earnings for July, $96,400.

Mrs. E. T. Boland, wife of the western agent of the Robt. Reford Co., died in Toronto recently.

TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Canadian Northern Ontario Ry.—W. R. Kelly has been appointed Trainmaster. Office, Parry Sound, Ont.

C. L. Webster has been appointed Master Mechanic. Office, Parry Sound, Ont.

W. B. Clearwater has been appointed Roadmaster. Office, Parry Sound, Ont.

Canadian Northern Quebec Ry.—A. F. Dion, heretofore Local Freight Agent, Quebec, and Lake St. John Ry., Quebec, has been appointed Local Freight Agent, C.N.Q.R., Montreal, vice S. F. Beamish.

Canadian Northern Ry.—F. Knight, heretofore Locomotive Foreman, Edmonton, Alta., has been appointed Locomotive Foreman, Port Arthur, Ont., succeeding G. H. Hedge, appointed Assistant Master Mechanic at Winnipeg, as announced in our July issue.

D. MacNicol, leading hand Port Arthur, Ont., shops, has been appointed Locomotive Foreman, Brandon, Man., succeeding W. M. Armstrong, transferred,

W. M. Armstrong, Locomotive Foreman, Brandon, Man., has been appointed Locomotive Foreman, Edmonton, Alta., succeeding F. Knight, transferred.

Canadian Pacific Ry.—R. King, heretofore Agent at McAdam Jct., N.B., has been appointed Terminal Agent, West St. John, N.B., succeeding J. R. Gilliland, appointed Superintendent Montreal Terminals, as announced in our July issue.

F. H. Cogswell, Chief of the Tariff Bureau, is reported to have resigned to take service in the M.C.R. Freight Department, Detroit, Mich.

M. J Tarpy has been appointed Passenger Agent at Niagara Falls, N.Y., vice R. F. Schornstein. Mr. Tarpy will remain at Niagara Falls until Sept. 30. During the winter D. Isaacs will probably represent the company there.

G. C. Wilson has been appointed acting City Freight Agent, Buffalo, N.Y., succeeding W. S. Nevins, resigned.

T. J. Wall is reported to have been appointed Travelling Passenger Agent, with headquarters at St. Louis, Mo., vice W. S. Merchant.

F. Nason has been appointed City Passenger Agent, San Francisco, Cal., succeeding W. C. Clawson, resigned.

H. T. Wilgress, who has been transferred from Kobe, Japan, to the Yokohama office, as announced in our Aug. issue, has been appointed chief assistant to the Manager of the Trans-Pacific Steamship Line.

Grand Trunk Pacific Ry.—G. C. Dunn, formerly Division Engineer, National Transcontinental Ry., at St. John, N.B., has been appointed District Engineer for the G.T. Pacific Ry., with headquarters at St. John.

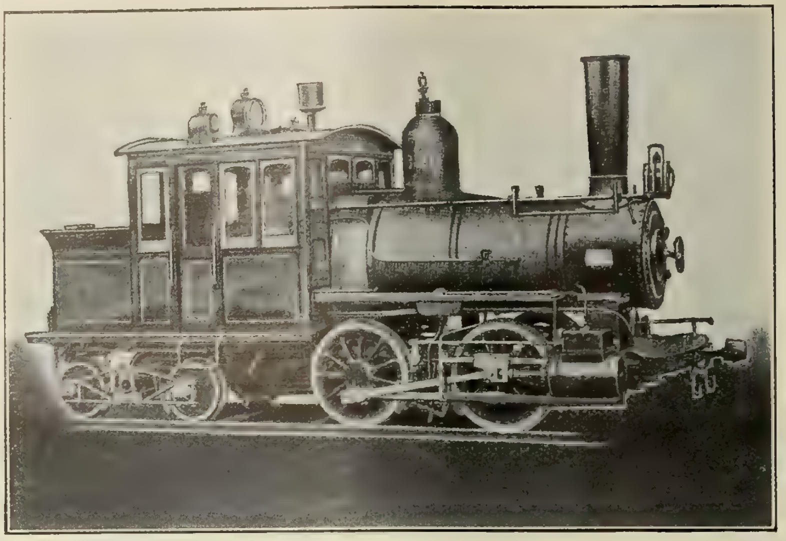
W. E. Davis, Passenger Traffic Manager G.T.R., has also been appointed to a similar position G.T.P.R. Office, Montreal.

G. T. Bell, General Passenger and Ticket Agent, G.T.R., has also been appointed to a similar position G.T.P.R. Office, Montreal.

J. E. Quick, General Baggage Agent, G.T.R., has also been appointed to a similar position G.T.P.R. Office, Toronto.

D. W. Steeper has been appointed acting Trainmaster Lake Superior Branch. Office, Westport, Ont.

H. H. Brewer, heretofore Superintendent Lake Superior Division, Westfort, Ont., has been appointed General Superintendent, in charge of transportation, with headquarters at Winnipeg, succeeding O. O. Winter, resigned.



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T. P. White has been appointed Car Service Agent, with headquarters at Winnipeg.

A press report states that S. Smith has been appointed Superintendent of Construction at Portage la Prairie, Man., succeeding O. Weeks, resigned.

J. A. Mitchell, heretofore Locomotive Foreman, G.T.R., Stratford, Ont., has been appointed General Foreman G.T.P.R., at Rivers, Man., with charge of Rivers shop and all matters pertaining to the motive power and car department there, succeeding W. M. Saxton, who has been transferred to Biggar, Sask.

W. C. C. Mehan, heretofore Superintendent Quebec, Montreal & Southern Ry., has been appointed Superintendent G.T.P.R. Office, Melville, Sask.

W. C. Cauthers has been appointed Chief Dispatcher lines west of Winnipeg. Office, Melville, Sask.

Grand Trunk Ry.—The following agents have been appointed: N. Clark, Beaconsfield, Que.; R. W. Groves, Markham, Ont.; W. J. Smith, Huntsville, Ont.; P. M. Major, Price, Ont.; P. F. Madden, Kinburn, Ont.; A. E. Campbell, Glasgow, Ont.; J. J. Freeman, Brule Lake, Ont.; R. R. McConnell, Haslett, Mich.; P. H. Swain, Stillwell, Mich.

Intercolonial Ry.—John Stewart, Inspector of Locomotives and Cars, has resigned, and has resumed work as a locomotive engineer. It is said the position of Inspector of Locomotives and Cars has been abolished.

J. Stewart, Travelling Auditor, has resigned.

Lake Superior Corporation.—W. C. Franz, heretofore General Manager Kanawha and West Virginia Rd., Charleston, W. Va., has been appointed General Manager of the Lake Superior Corporation and its subsidiary companies, including the Algoma Central and Hudson Bay Ry. Office, Sault Ste. Marie, Ont.

Wabash Rd.—J. D. McNamara, heretofore Assistant General Passenger Agent, has been appointed General Passenger Agent, with headquarters at St. Louis, Mo., vice C. S. Crane, assigned to other duties.

C. S. Crane has been appointed General Foreign Passenger Agent, reporting to the General Traffic Manager. Office, St. Louis, Mo.

C. H. Stinson, heretofore Assistant General Freight Agent, has been appointed General Freight Agent. Office, St. Louis, Mo.

W. F. Schmidt, heretofore Industrial Commissioner, has been appointed Assistant General Freight Agent, in charge of Fast Freight Line Traffic. Office, St. Louis, Mo. The office of Industrial Commissioner has been abolished.

H. E. Watts, heretofore District Freight and Passenger Agent, Moberly, Mo., has been appointed Assistant General Freight Agent, Office, St. Louis, Mo. He will have charge of all matters pertaining to the local business of the road, and will also assume charge of and handle matters which have heretofore been under the jurisdiction of the Industrial Commissioner. Office, St. Louis, Mo.

D. and H. Lines in Canada.

The Delaware and Hudson Co. owns and operates two railways in Canada, and in the report of the directors for the year 1907 there is given details of the organization, etc., of these lines—the Quebec, Montreal and Southern Ry., and the Napierville Junction Ry.

QUEBEC, MONTREAL AND SOUTHERN RY. CO.

This company is the successor to the Quebec Southern Ry. Co., incorporated in Canada in July, 1900. The Q.S.R. Co. acquired the East Richelieu Valley Ry. as of May 30, 1900, and on Aug. 7, 1900, acquired the United Counties Ry., the combined railways extending from Noyan Jct. to St. Robert (Bellevue Jct.), 82.83 miles, with trackage rights over the South Shore Ry. for five miles, from St. Robert to Sorel, Que. An agreement, dated Jan. 24, 1902, was made between the Quebec Southern and the South Shore Ry. Cos., covering an amalgamation of the two companies under the name of the Quebec Southern Ry. Co. The South Shore Ry. operated a line of 62 miles from St. Lambert to Pierreville, and possessed a right-of-way from St. Francis River at Pierreville easterly across the Nicolet River to St. Gregoire, on the G.T.R., a distance of over 22 miles. The completed railway under this amalgamation aggregates 144 miles.

Mileage—Shore Division, St. Lambert to Pierreville	Miles
Shore Division, St. Lambert to Pierreville	62
Southern Division, Sorel to Noyan Jct.	82
Total main track	144
Total sidings	13.03
Total present mileage	157.03
Under construction, Pierreville to Ste. Philomene	48.50
Grand Total	205.53

The line leaving the point of intersection with the G.T.R. main track, about 400 feet south of St. Lambert station, near the east end of the Victoria Bridge over the St. Lawrence River, curves to the northeast, and then along and upon the level lands bordering the St. Lawrence, and with undulating gradients and light curvature passing through Longueuil, Boucherville, Vercheres, St. Antoine, Contrecœur, St. Roch, Lanoraie, to Sorel, at the confluence of the Richelieu and St. Lawrence rivers. Thence, leaving the St. Lawrence and running southeasterly, passing through Bellevue Jct., Yamaska and St Francois du Lac to Pierreville, on the east bank of the River St. Francois, the eastern terminus of the Shore Division. At Bellevue Jct., three miles north of St. Robert, five miles southeast of Sorel, the Southern Division diverges, and leaving a point of intersection with the main line of the Shore Division, extends southerly to St. Aime, passing through St. Robert; thence southwesterly, passing through St. Louis, St. Judes and St. Barnabe to St. Hyacinthe; thence passing through St. Damase, Caroline, Rougemont, St. Angele, with crossing of Central Vermont Ry., Mount Johnson to Iberville, crossing here the C.P.R. and Central Vermont tracks at grade; thence through Sabrevoise, Henryville, Clarenceville, and into Noyan Jct., connecting with the G.T.R. (formerly the Canada Atlantic) and the Rutland Rd., and terminating about 2,000 ft. west of Noyan station. The line of this division, leaving the waters of the St. Joseph River at Bellevue Jct., crosses a level country, enters the valley of the River Yamaska at St. Aime, and follows this river and its headwaters more or less closely up to the summit at Rougemont; thence down tributaries of the Richelieu to Iberville; thence along, and more or less on or near the east bank of the Richelieu, to Noyan Jct. It is expected that the extension from Pierreville to Ste. Philomene, 48½ miles, will be completed about July 1, 1908. Eventually the line will be extended on to Chaudiere Jct., where it will connect with the Quebec bridge; and there will also be an extension from Chaudiere Jct. to Pt. Levis, connecting with the docks at the latter point.

A chart annexed to the report shows the earnings as sufficient to cover the expense of operation and substantial returns may be expected with the completion of the extensions now under construction. The position of the Quebec, Montreal and Southern Ry. in relation to St. Lawrence River traffic, and that of the country north of it, is of importance. The extension to Ste. Philomene, which is nearing completion, will connect at that point with the Lotbiniere and Megantic Ry. A branch from Becancourt to the St. Lawrence will enable the company to handle cars on floats from the pulp mills at Three Rivers and Batiscan to the southern side of the river, thus avoiding the long haul around the north side, and will give the company the long haul on its own rails. The manufacturing interests now located on the D. & H.'s lines are large consumers of raw materials, particularly the paper interests, and their demand is constant and insistent, and its regularity of supply important. Three Rivers and the country north of it furnish large supplies of this material, and with such connections as suggested above the traffic could be secured and all interests greatly benefited and relieved. Wood pulp and pulp wood from Canada is necessary for their life, and if these industries are to remain on the D. & H. lines, and thrive, it seems incumbent upon the company to insure protection in the matter of their supplies; for, if not so protected by all-rail, single-owned lines, with equipment equal to their demands, they will be forced to seek their supplies through other channels or abandon their location. A large part of the wood now received by the D. & H. Co. by rail is moved over the Quebec, Montreal and Southern Ry.'s tracks. Large tracts of land have been purchased by these paper industries in Canada, which will furnish additional traffic. Figures are at hand which show tonnage and revenue to the D. & H. Co. from the paper mill industry, as follows:

For Mills on its Line			Revenue
Cords of wood	annually,	740,500	$740,500 00
Tons of paper	"	350,850	438,562 50
Tons of pulp	"	193,750	193,750 00
Tons of coal	"	347,600	142,500 00
Total			$2,515,312 50
Add 10% on chemicals			251,531 25
Grand Total			$2,766,843 75

In addition to the above, there is the revenue from the supplies for employes, and passenger revenue from those living on the D. & H. lines. The position of the Quebec, Montreal and Southern line, when completed to Quebec, lying as it does in the very heart of the most valuable traffic-producing section, south and north of the St. Lawrence River, should control about all of this traffic. In the hands of adverse interests, it would be difficult to obtain the raw material for the industries along the D. & H. lines, except on terms which would be very onerous. The connections with the wood-supplying sections of Canada, so essential to the success of the industries of the D. & H. Co., might be cut off. It would preclude the D. & H. Co. from reaching with advantage to other lines in its territory with which the Q., M. & S.R. now has connection. The paper companies are placing orders for thousands of tons of wood pulp which move via Quebec, C.P.R. to Montreal, and G.T.R. to Rouse's Point, and over the D. & H. to destination. The connection at Quebec with the Quebec and Lake St. John Ry. will be of valuable advantage in handling of pulp wood and wood pulp shipments from points on the latter line covering 245 miles north and east of Quebec, and tapping large sections of spruce lands. With the completion of the Q., M. and S. R. extension to Quebec, a large part of this traffic can be taken from the Q. & L. S. J. Ry. at Quebec, giving the entire revenue to the Q., M. & S. and the D. & H. companies. In return traffic northbound, the shipments of coal would be increased. In addition to Montreal supply, the entire section along the line to Quebec would be supplied, and tonnage sent into Quebec. The Q., M. & S. line, via St. Lambert, St. Constant and Rouse's Point will be 19.3 miles, and the Q., M. & S. line, via Noyan

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and Rouse's Point, is 23.3 miles shorter, Quebec to New York, than any line at present operated. Negotiations are under way with the G.T.R. for trackage rights between Rouse's Point and Noyan; between St. Constant and St. Lambert, and for a special agreement covering Q., M. & S. Ry. trains, between St. Lambert and Montreal.

NAPIERVILLE JUNCTION RAILWAY.

The construction of this railway was originally undertaken by the Pacific Construction Co., and was afterwards turned over to the Napierville Jct. Ry. Co. The entire property, with all rights, franchises and privileges, was purchased by the D. & H. Co. April 9, 1907, for $615,680.56. The road extends from Rouse's Point, N.Y., at a point of connection with the D. & H. Co.'s railway, to a point of intersection with the C.P.R. and with the G.T.R. Massena Springs branch at St. Constant, 20 miles southwest of Montreal, and 13½ miles west of St. Lambert, at south end of Victoria Bridge. The mileage is as follows: Total length of main track, 28.35 miles; total length of sidings, 3.00 miles; total trackage, 31.35 miles. In the construction of this line, that portion between the point of intersection of the D. & H. main line at Rouse's Point, and the boundary line between the U.S. and Canada, 1.1 miles, was built by the D. & H. Co., and the portion between the boundary line and the intersection of the G.T.R. at St. Constant Jct., 27.25 miles, was built by the Napierville Junction Ry. Co. Negotiations are under way with the G.T.R. for trackage rights between St. Constant and Montreal. The Napierville Junction Ry. reduces the distance between Rouse's Point and Montreal by 7 miles.

From an operating standpoint, it would seem that the agricultural character of the country tributary to the road should develop a fair local business. The several towns, with considerable population, and that increased by the coming of the road, will give good passenger revenue, and the line as a link in connecting the D. & H. Co.'s line and the Q., M. & S.R. at St. Lambert will enjoy its proportion of the traffic which will follow the completion of the Q., M. & S.R. into Quebec. This line affords a direct connection with the C.P.R., and will enable a distribution of the company's coal to the territory served by that road.

Railways in Nova Scotia.

The report of the Provincial Engineer for Nova Scotia, R. McColl, for the year ended Sept. 30, 1907, gives particulars of the work of the department in connection with the general supervision of the construction and operation of subsidized railways. The expenditure on railway subsidies and loans during the period under review was $584,791.35, against $200,000 in 1900. The mileage, of railways in operation at the end of the period was 631, against 391 in 1904 and 167 in 1900; while in 1907 there were 324 miles of line under construction against 309 in 1904 and 118 in 1900.

The 631 miles of line cover only those railways which come within the Railway Act of Nova Scotia, in addition to which there are in the province 467 miles of the Intercolonial Ry. under the control of the Department of Railways, and the Dominion Atlantic Ry., 221 miles, which comes under the control of the Board of Railway Commissioners. The list of subsidized railways shows an increase of 15 miles over the figures for 1905-06. An examination of the returns of these lines shows that with the exception of the Cape Breton Ry. and the Nova Scotia Steel and Coal Co.'s Ry., all the lines show a net profit. The net profits of all the railways amount to about $150,000, which for the total mileage shows about $290 a mile a year. The average earnings amount to nearly $1,800 a mile a year. The receipts per mile of line vary very much, the variation being largely in proportion to the quantity of coal carried. The Canada Coal and Ry. Co., the Inverness Ry. and Coal Co., the Cumberland Coal and Ry. Co., and the Sydney and Louisburg Ry., vary from $10,000 a mile for the last to $3,000 a mile for the two first-named, while the Halifax and South Western Ry., where very little coal is carried, only shows an earning capacity of $850 a mile. The Provincial Engineer says: "Speaking generally, therefore, it would seem that while practically all our railways are not only paying operating expenses but a fair amount of profit, except where there is a large quantity of coal, or other such freight to be carried, the average Nova Scotia railway will not earn more than from $1,000 to $2,000 per mile of railway, of which probably not more than 20% will be net earnings. If, however, there is any large amount of coal to be shipped the receipts per mile and the net profits are likely to be pretty high. We must not conclude, however, that because the net earnings of any road are not very great, that this road is of little or no benefit for that reason. For example, the Halifax and South-Western earned during the past year something over $300,000, of which the net earnings to the company were about 10%, or $30,000. The saving, however, to the public by the reduction in the cost of transportation, more especially in passenger traffic, has probably been more than double this amount, and while the profits to the company have been only $30,000, the cost of transportation to the people along this line of railway has probably been reduced by $300,000 by the construction of this road, or about $1,000 for every mile of road constructed. The matter of the earning capacity of a railway is one that does not receive sufficient attention, not only from the public, but very often from the railway men and promoters generally.

"The cost of the construction of railways in the province on an average varies very little, especially where the roads are built on the same standard, the variation being probably not more than 20%, so that the fixed charges for capital and interest on any two roads differ very slightly, but as will be seen by the above earnings, not only the gross receipts per mile but the net receipts also vary very much, so that the value of the road depends largely upon the amount of traffic. The cost of construction as a rule varies very slightly, but the amount of traffic varies greatly, and its importance is paramount. For this reason the question of traffic should bear a much more important part in deciding the location of the road than the physical character of the country. Of course, where through traffic is heavy it is of the utmost importance to get a line as straight and with gradients as light as possible, but on the average road the securing the local traffic by some slight divergence from the straight line is much more important, and in the location of the line this should really receive more consideration than anything else. In the same way there should be considerable flexibility allowed in the construction of the road as to the standard adopted. While it is of the utmost importance, as before stated, in the case of heavy freight traffic to reduce the gradients as much as possible so as to enable heavy trains to be hauled, in the case of a section of country where the freight traffic is light and the passenger traffic is likely to be heavy, it is of much more importance to adopt a line that will accommodate the greatest number of people irrespective of a little increase in length or the use of a few heavy gradients, to adopting a line of higher standard as regards gradients and curvature which would not sufficiently accommodate the public so as to induce traffic. For this reason, while I consider that any money is well spent on a careful location of a line to reduce the quantities and cost of construction, it is even more important in projecting a line of railway to consider the question of having it located so as to best serve the transportation interests of the section of country through which it passes, and more time should be given to this matter."

There was a slight reduction in the cost of operation per train mile as compared with 1906, and a comparison with the cost in other parts of the Dominion speaks well for the economic management of the lines of the province. The question of the oversight of the operation of the railways is now becoming a very important part of the work of the Department, and will have to receive greater attention in future. During the early part of the year it was reported that a number of forest fires had been started by the railways, and that the act regarding the placing of screens on the locomotives to prevent sparks was not being obeyed by the different companies. An inspector was sent to examine locomotives, and under his directions the defects were remedied, and there had been no further fires.

During the year eight persons were killed and 12 injured through accidents in connection with the operation of steam railways. Not a single passenger, however, was injured on any of the railways of the province during the year. The report also notes a marked improvement in the promptness of the railway companies in reporting accidents.

Railway Organization in India.

By George R. Birch, Woodstock, N.B.

In view of the present wide interest being taken in railway matters, more especially with reference to the numerous unfortunate accidents that have lately occurred, in regard to their administration and working, a short article giving roughly the system on which railways are worked out in India, a country in which railway conditions more nearly approach this than any other, may be of interest. Briefly, the administrative work is divided among three departments, traffic, engineering and locomotive, and as on all but comparatively small lines it has been found impossible to exercise efficient active control from one center, the work has been decentralised as much as possible, and the line split up into districts, each averaging some 400 miles in length, on each of which an official of each of the three departments named is stationed. These officials are directly responsible for the working of the district, each in his own department, to their respective chiefs at headquarters, a pretty wide latitude, however, being allowed them as to the subjects necessary to be referred. Their titles, District Traffic Superintendent, District Engineer, and District Locomotive Superintendent, practically denote their respective duties; thus, the traffic officer is responsible for the collection, handling, and moving of all passengers and freight; the district engineer for the maintenance of the permanent way, stations and all company's property—this last a considerable item, as the railways provide quarters for all their staff, and the district locomotive superintendent for the maintenance and provision of power and the water supply in connection therewith. Each official has his own office and deals with all staff in his department, and though of necessity engineering and locomotives are at the orders of traffic, there is no question of one departmental official being subordinate to another. This division of administration

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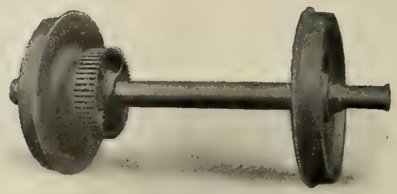

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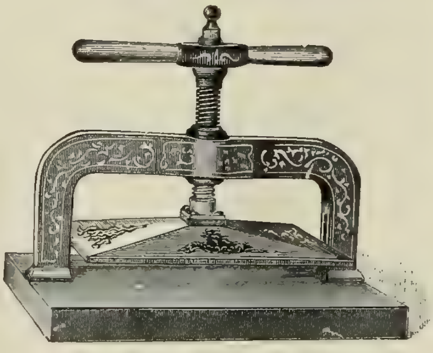

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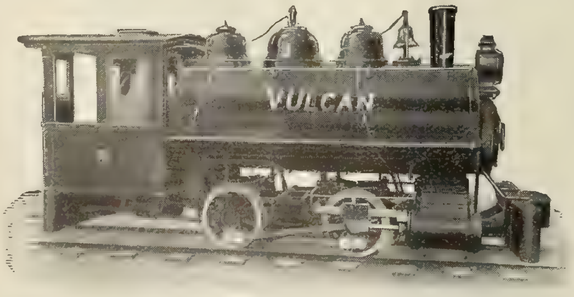

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means practically that each branch of the service is in the hands of a specialist; the traffic officer has to undergo a very thorough training in all the branches, transport and commercial, of his department; the engineering representative must be a qualified engineer, actually the majority of these men on Indian Railways are Royal Indian Engineering College (Coopers Hill) men, and the locomotive superintendent is an eminently practical official who has served his apprenticeship in one of the large railway shops in Great Britain and worked his way through. There are, of course, side departments necessary to the life of a railway, such as audit, printing, supply, medical, and carriage and wagon, but with the exception of the two last-named these are all situated at headquarters, and have merely a representative attached to each department on each district. The medical department has its own districts, each in charge of a duly qualified doctor, who attends to sanitation and the health of the employes on his district, and the carriage and wagon department maintains a small staff at all junction and large stations, who attend to petty repairs and routine departmental work such as cleaning, lighting and oiling of stock.

So much for the administration. The working of the line being practically in the hands of natives, a large amount of European supervision is necessary, and is exercised as follows, to take traffic first: Each district superintendent has under him two assistant superintendents, one in charge of the commercial work of the district, i.e., the collection of passengers and freight, adjustment of local rates, and all claims in connection with loss, delay or damage; the other has charge of the operating or transport work, i.e., the supply and movement of all passenger and freight stock, subject to a general control from headquarters; he also has direct control of the traffic staff on the district. Next there are as a rule three outdoor inspectors, two on the transport and one on the commercial side, who have to be constantly on the move over the district and who carry out a systematic check each station, the two former watching particularly the working of trains and stations and the latter canvassing for traffic. The audit department also has an inspector on each district who checks the books at each station periodically on behalf of his department. This brings us down to the actual stations, at each of which, taking way stations, the staff is divided into two batches, clerical and menial, the former consisting of the station master and his assistants, generally two, and the latter of the points and signal staff. The station master deals personally with all freight and freight and passenger returns, and exercises a general control of the work of the station; his assistants, who work turn about, attend to the telegraph work, all stations being connected by wire, and the receiving and despatching of trains; the menials, under the orders of the assistants, work the signals with which all stations are fitted, handle freight and passengers' luggage, and keep the station clean generally. Owing to caste prejudices some six to nine men have to be employed on this work, but this large staff is counteracted by the low rate of wage prevailing, viz., $1½ to $3 monthly, according to length of service. All stations are worked on the absolute block system, that is, no train may leave a station to follow another until the first is within the protection of the signals of the station ahead. A system of line clear books is kept up at each station, in which the departure time of all trains from the stations on either side is entered, together with their arrival time, and these books are most carefully checked by the inspectors on their visits. On the more progressive lines an elaborate electrical signal system has been brought into use, which makes it impossible for the starting signal to be given for a train until the preceding train by passing over a treadle within the protection of the signals of the station ahead completes the electrical circuit and releases the wires; this system has answered well, and as the cost is not great, is being pretty generally adopted.

The district engineer has, as a rule, three junior engineers under him, each in charge of a section of the district with a small office apiece, who are directly responsible for the maintenance of the road and upkeep and construction of buildings on their lengths; they in turn have under their orders two or three inspectors of permanent way, whose title denotes their work, and who are stationed about 50 miles apart, and generally two clerks of works who see to repairs to station and living quarters, and supervise contractors on construction of new buildings; all of these are Europeans, the section foreman and gangs on the road and under the carriage and works department being natives.

The locomotive superintendent on most districts has no assistant and not often an inspector, he being able to divide his time fairly equally between his office and the road. His district generally comprises two or more stations, at which engines change and where there are small locomotive repair shops at which a locomotive foreman is stationed, who is responsible for the supply of power at his station as required; the superintendent himself arranging the balancing of power on the district, and having direct and absolute control of all locomotive staff on the district.

[We do not agree with our contributor's statement that railway conditions in India more nearly approach Canada than those of any country, but we are pleased to publish his article, which is of very general interest.—Editor Railway and Marine World.]

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It is stated that the contract for the construction of 150 miles of the Abitibi section of the National Transcontinental Ry., awarded to the G.T. Pacific Ry. Co., and sublet to the Reynolds Construction Co., is to be cancelled owing to the inadequate progress which it is claimed is being made with the work.

J. Somerville, second vice-president of the Intercolonial Association of Machinists, who represented the men on the recent board of conciliation in connection with the complaints of C.P.R. employes, and who was responsible for the minority report in connection therewith, is reported to have been arrested at Ottawa for trespassing on C.P.R. property.

The Trunk Lines Association of the U.S. has declined to accede to the request of the trans-Atlantic steamship companies for a reduction in grain rates to the seaboard, to enable them to compete with the Montreal route. The association says that the reduction necessary to equalize the rates of competitive all-water routes to Montreal would result in rates being wholly unremunerative.

A press report states that a Commission has been appointed, consisting of E. Tiffin, General Traffic Manager; D. A. Storey, General Freight Agent, Intercolonial Ry., and U. A. Bowden, Engineer of the Department of Railways, to investigate the condition and business prospects of the various branch lines connecting with the Intercolonial Ry. in Nova Scotia, New Brunswick and Quebec, with a view to the acquisition, by purchase or lease, of those which may be operated with profit to the Intercolonial Ry., and with benefit to the districts through which they run.

ELECTRIC RAILWAYS.

Mt. McKay & Kakabeka Falls Ry.

Chief Railway Commissioner Mabee gave the following judgment July 22 in re the application of the Mount McKay and Kakabeka Falls Ry. Co., and the G.T. Pacific Ry. Co., the C.P.R. Co., and the C.N.R. Co., in respect to crossing matters at Fort William, Ont.:

This application presents important matters for consideration and the disposition I propose making of it may not be the wisest, but it has been long delayed, and the matter must be disposed of. A subway at James St. has been proposed, and if constructed, the closing of Heath St. is then recommended, and the traffic that now goes by Heath St. diverted to the subway—if this were done, then part of the cost of the work might well be imposed upon the steam roads. The Fort William Council refuses to close Heath St. by by-law, and assume liability to the landowners that would be affected by the closing of that street, but suggests that the Board order the closing of that street. I could not make such a direction without requiring that compensation should be made to all landowners injured by such closing, and if this were done, and the land damages arising therefrom made a part of the cost of the subway, it is admitted that the expense involved would be out of all proportion to the benefits that might be expected to accrue. Other serious difficulties arise in considering the closing of Heath St. By agreement between the C.P. Ry. Co. and the Council of Fort William, Heath St. carries the traffic of other streets that have been closed, and the railway company built an overhead passenger bridge in connection with establishing existing conditions at the point in question. Those arrangements, I think, should not, at the present at least, be disturbed. So if the closing of Heath St. is a necessary part of the subway proposition in order to make some show of reason for assessing the steam roads with part of the cost, and I think it is, then the subway is out of the question, unless the applicants can persuade the other parties concerned to contribute to the cost of the work, or prefer to construct the subway at their own expense.

Now, I think the electric road must have an entrance into the city; and if there is to be no subway, I consider the route proposed by the applicants, between the brick yard corner and Gore St., the only one possible. Hence the disposition of the matter will be that the applicants be granted permission to cross the Canadian Northern Ry. spur and G.T. Pacific tracks on Montreal St., and the G.T.P. and C.P. spurs and C.P. and Canadian Northern lines on Yonge St. All the main lines, and most, if not all, of the spurs crossed by the applicants are senior to them; so, of course, all expense involved in the crossings, protective appliances, maintenance, and operation must be borne by the applicants. There must be half interlockers installed at the three main line crossings; and the formal order, when drawn, will contain all proper protective, operative, and engineering features that the Board's engineer may suggest, subject to the Board's approval.

The foregoing may at once be communicated to all interested parties, and an order will forthwith issue embodying the same, unless the applicants, the three steam railway companies, and the Fort William Council decide among themselves some other solution of the problem, or unless the applicants prefer to construct the subway on James St. at their own expense. The applicants, however, need not be delayed in their operations by the foregoing suggestion, and may, unless the Board upon

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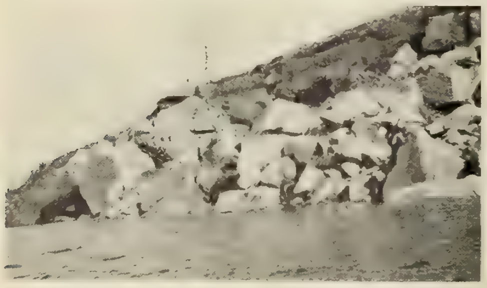
THE SIZE AND ROCK FORMATIONS WERE IDENTICAL AND YET THE MACHINE-DRILLED CUT SHOWED A SAVING OF $15.25 PER DAY, AND DOUBLE THE YARDAGE WAS REMOVED. THESE INSTANCES ARE DESCRIBED IN PAMPHLETS, SENT ON REQUEST.



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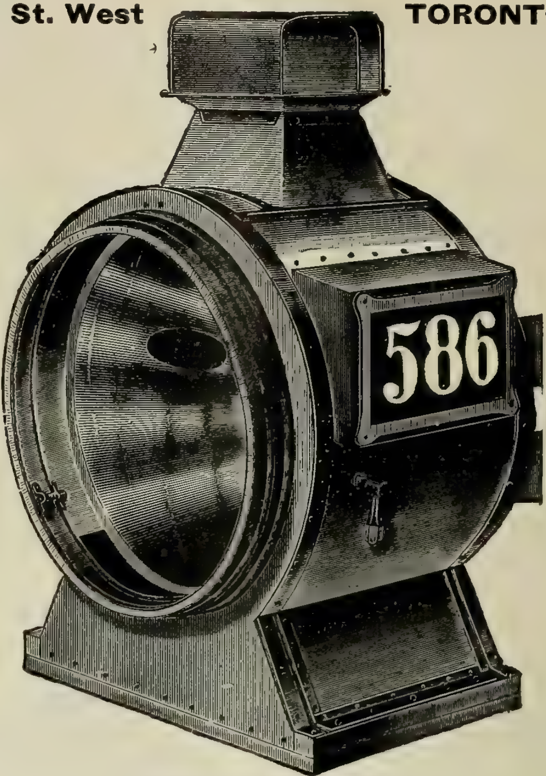

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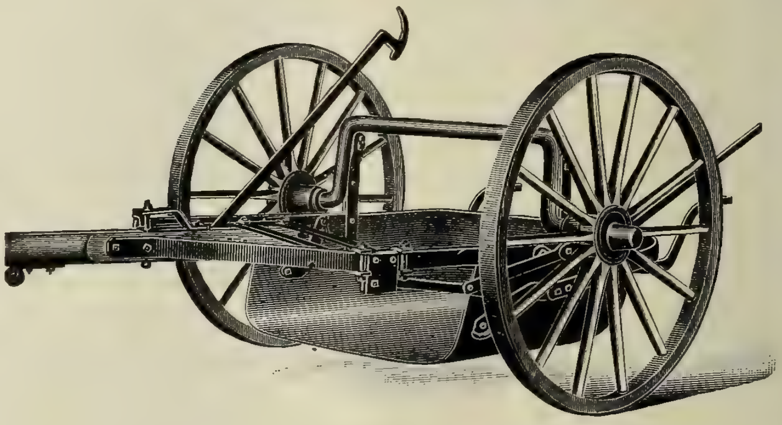
TORONTO, CANADA



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application otherwise directs, at once proceed with the work along Montreal and Yonge Sts. Some other crossings are involved in the application, but the President of the electric railway stated that some negotiations were on foot respecting the location of the road upon streets other than those shown upon the plan. The Board may be advised as to the result, and, unless the parties agree, will at once dispose of the questions involved in those other crossings. Plans for interlockers must be at once submitted by the applicants.

◆

Projects, Construction and Betterments.

The British Columbia Electric Ry. has placed an order for the installation of a large storage battery for its Victoria plant. The estimated cost is placed at $75,000. The company has decided to proceed at once with the construction of the extension to Ross Bay cemetery, Victoria. This extension will make connection with the Fort St. line at Cook St., and will go along Cook St., terminating probably at the roadway leading to Foul Bay beach. The estimated cost of the extension is $40,000. (Aug., pg. 583).

Crow's Nest and Prairie Electric Ry.—This is the title of a company incorporated by the Alberta Legislature with power to construct an electric railway from near the western end of Crow's Nest Lake easterly through or near to Coleman, Blairmore, Frank, Bellevue, Lundbreck, and Cowley, to Pincher Creek. The company has power to issue $150,000 of capital stock, and bonds to the amount of $10,000 a mile of railway, and to enter into agreements with other companies for various purposes. The head offices are at Coleman, Alta., and the provisional directors are: A. Cameron, D. J. McIntyre, W. R. McRae, Coleman; T. Smith, Frank, Alta.; J. H. Schofield, Pincher Creek, Alta.

Dunnville, Wellandport and Beamsville Electric Ry.—Survey parties started out Aug. 3, to make further surveys for this projected line. The line as now proposed would run from Dunnville to Beamsville, via Wellandport and St. Anne's, Ont. At Beamsville, connection would be made with the Hamilton, Grimsby and Beamsville Electric Ry. Jas. A. Ross, Wellandport, Ont., is President of the company. (July, pg. 509).

Edmonton-Strathcona.—At a meeting held July 30, arrangements were made between the Edmonton City Council, and the Strathcona Radial Tramway Co., by which that company's charter is transferred to the council. The S.R.T. Co. had a charter and franchises for the construction of an electric railway in Strathcona, and extending to Edmonton, the franchise being for a period of 30 years.

The Edmonton City Council has under construction an electric railway in the city. Over two miles of track have been laid on Jasper Ave., First St., and Namayo St., and there are on hand ties, rails and other material for a considerable extension. The proposal under discussion was that the Strathcona Radial Ry. would complete certain connecting lines, and that the Edmonton Council would operate the whole under its charter. The additional construction would include a single-track extension from Jasper Ave. to 21st St., a single-track extension on Namayo Ave. to Albert Ave., some distance beyond Norwood boulevard; the line to Strathcona would leave Jasper Ave. at 9th St., run to Saskatchewan Ave., down that avenue past the Provincial Government buildings to Currie St., on the Ross flats, up Currie St. to the bridge and on through Strathcona to the Provincial University. (Aug., pg. 583).

Fort William, Ont.—The city council of Fort William has completed arrangements for constructing a second track on the Simpson St. and Syndicate Ave. lines, in that city, taken over from the Port Arthur City Council. The work is expected to be completed early in Oct.

Lethbridge Radial Tramway Co.—This is the title of a company incorporated by the Alberta Legislature with power to construct lines of communication for the carriage of "passengers and freight by means of electricity or by such motive power except steam, as the company may, from time to time, deem expedient." The lines which the company may construct are from Lethbridge to Raymond, Alta.; Lethbridge to Stafford, and from Lethbridge to tp. 9 or 10, in ranges 20 and 21, west of the fourth meridian. The company must not lay its tracks along any public street or highway except with the consent of the municipality, and the approval of the Minister of Public Works. The company has a capital of $100,000, has power to issue bonds to the amount of $10,000 a mile, and is authorized to enter into agreements with any person or company having right and authority to construct and operate street railways or tramways within 80 miles of Lethbridge. The company's head office is at Lethbridge, and the provisional directors are: W. Henderson, C. F. P. Conybeare, M. Freeman, F. H. Newburn, H. T. Cherry, W. Hardy, and B. M. Jones, Lethbridge.

Montreal and Southern Counties Ry.—Considerable progress has been made with the negotiations for a franchise in Longueuil, Que. The principal clause in the by-law under consideration by the town council provides for a contract for 21 years, for the first 10 years of which the company would be free of taxation and water rates. The town would also provide a free site. The cost of the removal of snow is to be divided evenly between the council and the company, and the fares chargeable are not to exceed those now charged by the steam railways. It is also provided that there will be a 30-minute service on weekdays between 5 and 9 a.m., and between 5 and 7 p.m., and hourly service at other times. The by-law also specifies the routes to be followed. Before the by-law is finally passed the company has to lay before the council copies of its contract with the city of Montreal, and with the G.T.R., respecting the construction and operation of its line across the Victoria Bridge and into Montreal. (Aug., pg. 583).

Montreal Park and Island Ry.—The new line constructed by the company through the town of Notre Dame de Grace, and which was opened for traffic Aug. 13, runs for about two miles through the newly created town of Notre Dame de Grace, the western end of the line being in sight of the C.P.R. station at Montreal West. (Aug., pg. 583).

Ontario West Shore Ry.—Work on the construction of this line between Goderich and Kincardine, Ont., was reported to have commenced Aug. 18 at Port Albert, and at Eighteen Mile River. At Prince Albert a long and deep cut will have to be made, and it is on this that work has been started. V. M. Roberts is Chief Engineer in charge of construction, and the company at present is doing its own construction work.

J. W. Moyes, President of the company, stated Aug. 12, that he hoped soon to be in a position to discuss the extension of the company's line in the direction of Stratford. (July, pg. 509).

The Ottawa Electric Ry. Co. has concluded the purchase of an area of land on Cobourg St., for the purpose of erecting car barns. It is intended to go on with the erection of these at an early date. (Aug., pg. 583).

Red Deer Ry.—This is the title of a company incorporated by the Alberta Legislature, with power to construct a railway to be operated by electricity, compressed air, gasolene and any other motive power approved by the Minister of Public Works, in the town of Red Deer, and thence eastward to Content, with a branch to the coal fields on the Red Deer River; from Content northeasterly to Nevis, and from any point in Red Deer to such points outside as may be approved by the Minister of Public Works. The lines to be constructed may be carried along or across any public street or highway, with the consent of the municipality and the approval of the Minister of Public Works, subject to such conditions as may be necessary. The capital stock of the company is fixed at $100,000, and power is given to issue bonds to the extent of $15,000 a mile. The company may enter into agreements with other companies, and is given various incidental powers. Its head offices are at Red Deer, and the provisional directors are: G. W. Smith, J. J. Gaetz, F. W. Galbraith, W. A. Moore, J. C. Moore, Red Deer.

St. John Ry.—The Intercolonial Ry. has been engaged in effecting some improvements on the bridge carrying Stanley St. across the line in St. John, N.B. On Aug. 14, the St. J. Ry. secured a stoppage of the work on the ground that the gradient would be so altered as to interfere with the operations of its electric railway. Neither the city or the street railway desired the alteration, and all that the company desired in interfering with the work was an assurance that the Government would bear the expense of any alteration which would have to be made in the street railway tracks. (June, pg. 431).

St. Thomas Street Ry.—The estimate submitted to the city council of St. Thomas, Ont., for the extension of the street railway system to Port Stanley, does not include equipment, but provides for the utilization of electric power from the lines to be constructed by the Ontario Government from Niagara. The cost of the roadbed is placed at $6,638 a mile, or $46,466 for the seven miles, with $3,000 additional for bridges, and $1,500 additional for turn-outs; the cost of the overhead work is placed at $11,690, and $5,000 is added for incidentals, which makes the total estimated cost of the line $67,950. (June, pg. 431).

Toronto Ry.—In the work of relaying the street railway tracks on Bloor St. West, the company is using T rails instead of girder rails. The City Engineer, when questioned about the matter at a meeting of the Board of Control, said the company was using the T rail on all new lines, and upon reconstructions in all parts of the city, with the exception of the downtown lines. The T rail, in his opinion, was as good as the girder rail. (July, pg. 509).

Toronto Suburban Ry.—The matter of the extension of the company's franchise has been discussed at several meetings of the West Toronto City Council recently. On Aug. 11, G. C. Royce, Manager, stated that the company desired to extend its line from the present terminus at the corner of Keele and Dundas streets to Swansea, via Keele, Annette and Elizabeth streets The company did not want an extension of the franchise over all the old route, only for that part on Keele St. north, and the new line. Aug. 17, the Mayor outlined a route which would be more satisfactory to the council than the one suggested by the Manager, and in an interview Aug. 20, the Mayor said the council was determined never to grant an extension of the franchise to the company. The question came up again at a meeting Aug. 24.

Electric Ry. Finance, Meetings, Etc.

Berlin and Bridgeport Electric St. Ry.—Following are the officers and directors for the current year: President, W. H. Breithaupt; Vice-President, J. S. Anthes; Secretary, A. Millar; other directors, L. J. Breithaupt, G. Shirk. The annual meeting was held Aug. 10, but the directors do not issue an annual report.

British Columbia Electric Ry.—Gross earnings for June, $157,727; operating expenses, $96,729; net earnings, $60,998; renewal funds, $10,750; income from investments, $11,036; against $132,168 gross earnings; $76,989 operating expenses (including provision for loss occasioned by accident on Lulu Island line); $55,179 net earnings; $9,325 renewal funds; $9,536 income from investments, for June, 1907. Total earnings for 12 months ended June 30, $1,962,924; net earnings, $912,928; against $1,449,287 total earnings; $698,111 net earnings for same period 1906-07.

Galt, Preston and Hespeler Ry.—It is understood that although the Board of Railway Commissioners has recommended the Governor in Council to approve and sanction the conveyance and lease of the line, and of the Preston and Berlin Ry., to the Berlin, Wellesley, Waterloo and Lake Huron Ry., the actual transfer is not likely to take place for some time. It is also understood that Parliament will be asked to authorize a change in the name of the B.W.W. and L.H. Ry.

Grand Valley Ry.—An action has been entered by J. S. Clark, on behalf of himself and other bondholders and shareholders, for an injunction restraining the G.V. Ry. Co. from selling its property, franchises, etc., to M. A. Verner, Pittsburg, Pa. It is alleged that W. S. Dinnick, A. J. Pattison, J. J. Warren, E. T. Fox, J. S. King, J. Firstbrook, J. R. Stratton, Toronto, and J. G. Wallace, Woodstock, Ont., who are joined with the company as defendants, obtained control of the company by unfair and fraudulent methods, and that they or some of them are receiving personal gains by making the sale to Mr. Verner.

A writ has been issued by the Metropolitan National Bank, of Pittsburg, Pa., against the G. V. Ry., to recover $875, claimed to be due on account of interest coupons.

Halifax Electric Tramway Co.—Receipts for July, $19,188.65, against $18,281.00 for July, 1907. Total receipts for 7 months ended July 31, $99,765.45, against $95,651.10 for same period 1907.

Hamilton Street Ry.—At a special meeting of the city council, Aug. 19, it was decided to submit the by-law approving a new agreement with the Street Ry. Co. to a vote of the taxpayers Sept. 16. The agreement provides among other things that the city percentage shall be reduced from 8% to 6% on all earnings over $316,000.

Kingston, Portsmouth and Cataraqui St. Ry.—The Kingston, Ont., City Council has under consideration a by-law for submission to the taxpayers, providing for the purchase of the K.P. and C. St. R., and its operation as a municipal enterprise.

London St. Ry.—Gross earnings for June, $20,634.52; operating expenses, $14,131.43; net earnings, $6,503.09; fixed charges, $2,279.00; surplus, $4,224.09; against $22,302.82 gross earnings; $14,868.32 operating expenses; $7,434.50 net earnings; $5,196.03 surplus, for June 1907. Total earnings for 6 months ended June 30, $106,991.42; operating expenses, $81,060.02; net earnings, $25,931.40; fixed charges, $13,873.82; surplus, $12,057.38; against $107,432.36 total earnings; $81,248.71 operating expenses; $26,183.65 net earnings; $13,395.04 fixed charges; $12,798.61 surplus, for same period 1907.

Montreal St. Ry.—Gross earnings for July, $326,524.39; operating expenses, $162,-

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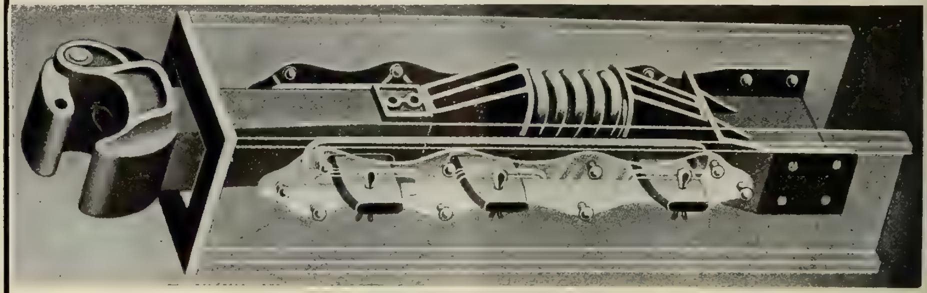

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CANADIAN NORTHERN ONTARIO to Beaverton, Sparrow Lake, Muskokas, Georgian Bay, Bolger Lake, the Maganetawan and French Rivers.

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QUEBEC AND LAKE ST. JOHN from Quebec City to the Upper Ste. Maurice, St. John and the Saguenay.

HALIFAX AND SOUTH WESTERN along the ocean shore of Nova Scotia (700 miles of which has been opened for the summerer), Lake Rossignol and the Annapolis Valley.

THE INVERNESS skirting Gulf of St. Lawrence shore of Cape Breton Island.

CANADIAN NORTHERN traversing the Superior Divide largely along the historic Dawson Route. Through Manitoba to Saskatchewan, on to Edmonton and to the gateway of the Real Northwest.

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413.90; net earnings, $164,110.49; city percentage on earnings, $32,317.33; interest on bonds and loans, $16,583.23; contingent for renewals, $15,667.66; rent leased lines, $444.43; surplus, $99,097.84; against $339,756.45 gross earnings; $175,946.86 operating expenses; $163,809.59 net earnings; $32,070.40 city percentage on earnings; $18,873.41 interest on bonds and loans; $16,449.09 contingent for renewals; $339.96 rent leased lines; $96,076.73 surplus for July, 1907. Total earnings for 10 months ended July 31, $2,999,287.92; operating expenses, $1,814,423.44; net earnings, $1,184,859.48; standing charges, $515,888.75; surplus, $668,970.73; against $2,834,644.35 total earnings; $1,761,545.18 operating expenses; $1,073,099.17 net earnings; $457,347.08 standing charges; $615, 752.09 surplus for same period 1906-07.

Port Arthur Electric Ry.—A cheque for $52,000 has been signed by the Fort William, Ont., city council, payable to the Port Arthur city council, as the purchase price of that portion of the P.A. Electric Ry., within the city of Fort William.

Toronto Ry.—W. Mackenzie, President Toronto Ry., on his return from London, Eng., Aug. 3, said the Toronto Power Co. had successfully floated an issue of $2,500,000 of debentures guaranteed by the T. Ry. Co. The T. P. Co. took over the Electrical Development Co., explained Mr. Mackenzie, and the Power Co. itself is owned by the T. Ry. Co.

Car earnings for July, $299,245.75, against $300,591.66 for July, 1907. Total earnings for 7 months ended July 31, $1,972,393.61, against $1,876,870.90 for same period 1907.

Windsor, Essex and Lake Shore Rapid Ry.—There has been deposited with the Provincial Secretary at Toronto, two mortgage deeds of the company's property, dated May 4 and May 30, respectively.

Electric Railway Notes.

The Ottawa Electric Ry. is having two pay-as-you-enter cars constructed. The first of these has been placed in service.

R. H. Sperling, General Manager B.C. Electric Ry., returned to Vancouver, B.C., Aug. 15, from a trip to Great Britain.

H. R. Mitchell, chief clerk of the Toronto and York Radial Ry., Toronto, was drowned, while bathing, at Honey Harbor, Ont., Aug. 2.

The London, Ont., city council decided Aug. 17 that the question of allowing the operation of a street car service in the city on Sundays shall be submitted to a vote of the people.

H. N. Bartlett, Superintendent of the Quebec Ry., Light and Power Co., Citadel Division, was presented with a gold stick pin with crest in diamonds and enamel, by the Prince of Wales during his recent visit to Quebec.

The Edmonton, Alta., city council has placed an order for seven 20-cross seat centre-aisle semi-convertible, double-truck electric cars with the Ottawa Car Co., Ottawa, Ont. Two cars are to be delivered early in Sept., and the remaining five in Oct.

W. N. Warburton, until recently manager of the Windsor, Essex and Lake Shore Rapid Ry., and prior to that Manager of the Chatham, Wallaceburg and Lake Erie Ry., has moved from Chatham to Hamilton, Ont., where he will engage in private business.

The Toronto Ry. on some of its lines has adopted a system of stopping the cars in the middle of a block in order to collect fares. This is being done in order to put a stop to the practice of people getting on the cars, riding for a short distance and getting off before the conductor has time to collect the fares.

F. H. McGuigan, formerly Fourth Vice-President G.T.R., has entered into an agreement with the Ontario Government for the construction of a power transmission line from Niagara to various points in the province. The power is to be supplied to municipalities and sold by them to electric railways and industrial concerns.

The coroner's jury which investigated the circumstances attending the death of F. Donovan, at Chatham, Ont., found a verdict, Aug. 17, to the effect that he came to his death "through injuries received in a rear-end collision between cars 14 and 8 of the Chatham, Wallaceburg and Lake Erie Ry., and that the collision occurred through the negligence of the C. W. and L.E.R. Co. in allowing overcrowded cars to run too closely together."

Elevators and the Grain Acts.

An act to amend the Manitoba Grain Act was passed at the recent session of the Dominion Parliament. Par. h, sec. 2, is repealed, and the following substituted therefor: "'Public terminal elevator' includes every elevator located at any point declared by the Minister to be a terminal, and 'terminal elevator' in the provisions of this Act relating to terminal elevators and warehouses, includes a warehouse." Pars. i, j, and k, are added to sec. 2: (i) "Eastern transfer elevator" means any elevator east of Fort William and Port Arthur which receives western grain for storage or reshipment for a compensation. Sec. 3 is repealed and a new one substituted, providing that the Act shall apply to the Manitoba Inspection Division comprising Manitoba, Saskatchewan, Alberta, the Northwest Territories, and that portion of Ontario lying west of and including Port Arthur. Secs. 10 to 16 are repealed, and the heading between secs. 16 and 17 is struck out and "Public Terminal Elevators, Eastern Transfer Elevators and Warehouses" substituted. A new section is substituted for sec. 19, providing that no discrimination shall be made between persons desiring to avail themselves of warehouse facilities; every public terminal elevator warehouseman in the Manitoba Inspection Division shall receive any grain tendered to him in a dry and suitable condition for warehousing, in the usual manner in which terminal elevators are accustomed to receive grain; grain so received shall in all cases be inspected and graded by a duly authorized inspector and stored with grain of a similar grade; no grain shall leave a public terminal point without being officially weighed unless the owner or his agent orders otherwise; every eastern transfer elevator warehouseman shall receive for storage western grain tendered him through the ordinary channels of transportation, in such parcels or lots as are shipped; every eastern transfer elevator warehouseman shall keep a correct record of each parcel or lot of grain received, noting the name of the boat and number of the hold from which taken, or the number of the car, the billed weight, the actual weight as weighed in by him and shortage or overage, the number of the bin in which stored, and in case of a transfer in the elevator the number of the bin to which transferred, the date of shipment out of elevator with the number of car or name of boat and number of hold, and in all cases where a certificate of grade accompanies a lot or parcel of grain the identity of such certificate with the lot or parcel of grain shall be preserved; he shall keep a correct record of the name of the shipper, the party to be advised of the shipment and the consignee; the identity of each parcel or lot of western grain shipped to an eastern transfer elevator shall be preserved, except that different parcels or lots of the same grades may be binned together when there is not sufficient space in the elevator to keep the parcels or lots separate; in no case, whether in a public terminal elevator in the Manitoba Inspection Division or in an eastern transfer elevator, shall grain of different grades be mixed together while in store; every public terminal warehouseman in the Manitoba Inspection Division shall clean all grain received by him on which the inspector has set dockage for cleaning, except all rejected grades, which shall be cleaned only upon the request of the owner; every public terminal warehouseman in the Manitoba Inspection Division shall pay or make allowance to the owner for all domestic grain of a commercial value in screenings on all cars graded by the inspector clean, to clean for domestic grain, as set forth in sec. 135 of The Inspection and Sale Act, as amended by ch. 36 R.S.C. 1908, to the quantity assessed by the inspector; every public terminal warehouseman in the Manitoba Inspection Division shall insure against fire, with companies satisfactory to the Commissioner, all grain received, handled or stored by him, provided always that this subsection shall not apply to eastern transfer warehousemen. Sec. 20 is amended by the substitution of the words "shipping receipt, or bill of lading, or both, as the case may be," for the words, "railway shipping receipt." Sec. 29 is repealed, the new section providing that the owner, lessee or manager of every public terminal elevator shall furnish at such times and in such manner, as the Commissioner may prescribe, a verified statement in writing, (a) in the case of a public terminal elevator in the Manitoba Inspection Division, as to the condition and management of so much of the business of such owner, lessee or manager as relates to such elevator; (b) in the case of an eastern transfer elevator, as to the amount, condition and management of the business done in western grain by the elevator. Sec. 35 is replaced by a new section providing, in case a terminal warehouseman in the Manitoba Inspection Division considers that any portion of the grain in his elevator is out of condition or becoming so, he shall consult the resident official grain inspector, or his authorized deputy, who shall examine the grain in question, and if he finds it out of condition or becoming so, and if he is of the opinion that it can be brought back to condition, or further deterioration prevented, he may order it to be re-elevated, at the expense of the owner of the grain, and if it is found that the condition of the grain is such that it cannot be brought back to condition, or further deterioration prevented by re-elevating, he shall give notice to the Commissioner and the grain owner. Sec. 38 provides that when grain has been declared to be out of condition and the owner does not remove it within one month of the date of such notice, the warehouseman may, after having given public notice as provided, sell the grain at the expense and on account of the owner, placing such proceeds against all charges accrued, and the owner of the grain shall be liable for any deficiency. Sec. 40 declares that nothing contained in secs. 34 to 39 inclusive, nor in secs. 43 and 44 shall be construed as to permit any warehouseman to deliver any grain stored in a special bin or by itself to anyone but the owner of the lot, or upon his written authority. The following is added to subsection 1, sec. 56: "In the case only of grain in special bin, should the storage receipts and lawful charges against the grain not be delivered or paid at the time of the billing of the car, the elevator operator may hold the bill of lading until the owner has surrendered the storage receipts therefor and paid all lawful storage charges due thereon: provided that it shall be an offence under this Act for the elevator operator to sell or dispose of such bill of lading without the consent of the owner of the grain, the bill of lading to be made out in all cases in the name of the owner of the grain shipped"; and sec. 60 is amended by the following addition: "Except in the case of accidental damage to, or the accidental destruction of, any public country elevator in which grain has been accepted for general storage as herein provided, if the person operating it, when called upon to do so by the owner of the grain, fails to account for the grain in accordance with the terms of the warehouse receipt given under the provisions of this Act or of the further orders of the owner, he shall be deemed guilty of an offence under sec. 355 of the Criminal Code, and shall be liable to the penalties therein provided and, in addition, to the forfeiture of his license." A new section is substituted for sec. 70, in part as follows: When ordered by the Commissioner, any person operating a public country elevator or warehouse under this Act, shall, immediately after the end of each month in which the elevator or warehouse shall have been operated, furnish in writing to the Commissioner, a return or statement showing: (a) the amount of grain on hand in the elevator at the commencement of such month, and the total amount of warehouse receipts at that time outstanding in respect of the said grain; (b) the total amount of warehouse receipts issued, the total amount of warehouse receipts surrendered by the holders thereof, and the total amount of warehouse receipts outstanding; (c) the amount of grain received and stored in the elevator or warehouse; (d) the amount of grain delivered or shipped from the elevator or warehouse, and (e) the amount of grain on hand in the elevator or warehouse at the expiration of such month. A penalty of not less than $50, and not more than $1,000, is provided for the making of a false

THE CANADIAN PACIFIC RAILWAY CO.

Dividends for the half-year ended 30th June, 1908, have been declared as follows:

On the Preference Stock, Two per cent.

On the Common Stock, Three per cent.

A further sum equal to one-half of one per cent. on the Common Stock will be paid thereon at the same time out of interest on the proceeds of land sales.

Warrants for the Common Stock dividend will be mailed on 30th September next to shareholders of record at the closing of the books in Montreal, New York and London respectively. The Preference Stock dividend will be paid on Thursday, October 1st next, to Shareholders of record at the closing of the books at the Company's London Office, No. 62 Charing Cross, London, S.W.

The Common Stock Transfer Books will close in Montreal, New York and London, at 3 p.m., on Tuesday, September 1st. The Preference Stock Books will also close at 3 p.m., on Tuesday, September 1st.

All books will be reopened on Thursday, October 8th next.

By order of the Board,
W. R. BAKER,
Secretary.

Montreal, 10th August, 1908.

JAMES FOSTER
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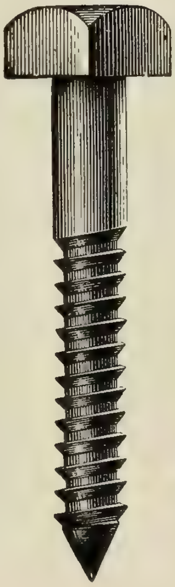

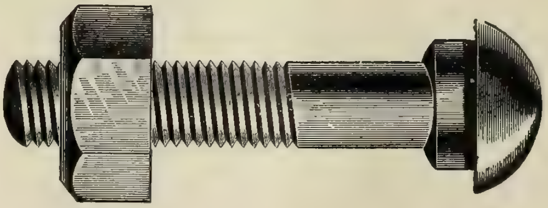

return. Under the heading of General Provisions, a penalty ranging from $500 to $1,000 is provided for any person operating a country elevator, and entering into a combination for the pooling or division of earnings or receipts. The Act, which was assented to on July 20, comes into operation Sept. 1, together with the Inspection and Sale of Grain Amendment Act, a resume of which was given in our July issue.

Grain Elevator Notes.

The Cardston Milling Co., Ltd., Cardston, Alta., is erecting an elevator there.

The Canadian Elevator Co. will shortly build an elevator at Foam Lake, Sask.

Cameron Bros., Strathcona, Alta., it is said, are to erect an elevator at Tofield, Alta.

The G.T.R. elevator at Tiffin, Ont., will be completed in time to receive grain this season.

An elevator is being erected near Lethbridge, Alta., on the line of the Alberta Ry. and Irrigation Co.

It is stated that an elevator is to be built at Granum, Alta., by the Claresholm Lumber and Grain Co.

The Oxbow Farmers' Elevator and Trading Co., Ltd., of Saskatchewan, has increased its capital from $10,000 to $15,000.

A press report states that the G.T. Pacific Ry. has decided to erect an elevator of 30,000 bush. capacity at Waldron, Sask.

The Estevan Farmers' Elevator and Trading Co., of Manitoba, has decided to build an additional elevator of about 40,000 bush.

An elevator at Keelwill, Sask., and another at Guernsay, Sask., each of 30,000 bush., will, it is reported, be erected by T. S. Matheson.

The Farmers' Milling Co., Ltd., recently incorporated at Duck Lake, Man., with a capital of $25,000, is proposing to erect a mill and elevator there.

The Smith Grain Co., Ltd., of Winnipeg, Man., is about to change its name to the Inland Grain Co., Ltd., and to increase its capital from $40,000 to $75,000.

A press report states that eight elevators are to be erected at once in Saskatchewan, with E. E. Head, of Minneapolis, Minn., in charge of the construction work.

With the completion of the work on the C.P.R. elevator D at Fort William, Ont., the total elevator capacity at that point will be 12,650,000 bush., making, it is said, the fifth of the elevator points on the continent. Elevator D will have a capacity of 3,400,000 bush.

A. A. Bowen, Kemptville, Ont., has been appointed Government Inspector of Grain and Weighmaster, his duties being to visit eastern transfer elevators to look into the weighing of grain, and to investigate complaints formulated by the Dominion Marine Association regarding shortages.

A report from Winnipeg states that fewer elevators are being built this year than usual. This, it is claimed, is partly due to the operation of the law regarding the supply of cars by railway companies, whereby farmers may hold cars at certain points until it suits their convenience to utilize them.

The question of a raise in insurance rates on grain in elevators is again to the fore, and it is anticipated that an increase will come into effect during the current season. The Underwriters' Association is dealing with the matter, and is considering whether the business is paying at the present rates.

The Montreal Harbor Commissioners are providing additional conveyors from the central elevator, so that vessels lying at any of the berths on the long piers can be loaded without being moved. It is anticipated that the whole work will be completed and in operation before the Montreal season closes.

The Pembina Municipality Farmers' Elevator Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $5,000, and office at Manitou. A contract has been awarded for the construction of a 40,000 bush. elevator. The officers of the company are: President, L. Armstrong; Secretary-Treasurer, H. Burke.

The State Elevator Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $100,000, and office at Winnipeg, Man., to acquire, build and operate elevators, grain warehouses, etc., and to carry on business connected therewith. The provisional directors are: K. B. Stoddart, J. Stewart, T. L. Hartley, Winnipeg, Man.; Sir W. B. Bowring, W. B. Stoddart, Liverpool, Eng.; L. B. Stoddart, New York.

Ontario and Manitoba Flour Mills, Ltd., has been incorporated under the Dominion Companies Act, with a capital of $750,000 and office at Ottawa, to carry on the business of selling, storing and shipping grain, etc.; to build, purchase or otherwise acquire and operate elevators, steam and other vessels, etc., and to carry on a transportation business on the lakes and rivers. The provisional directors are: A. W. Fraser, J. G. Gibson, J. Mulhall, H. H. Williams, A. G. Mather, N J. Ker, Ottawa.

A. J. McIntyre, Superintendent of Construction of Government elevators, is reported to have said recently that the Government elevator at St. John, N.B., had not proved a great success on account of the long haul necessary to bring the grain to port. In connection with the Port Colborne, Ont., elevator, he is stated to have said: "The elevator will be of the greatest importance to Canada, for through its erection the immense grain trade from the west will be transported through Canada to the ports at Montreal and St. John instead of going to New York from Buffalo."

The Montreal Harbor Commissioners' elevator is credited with having created a record in speed of unloading a vessel, by removing 80,000 bush. of wheat from the s.s. A. D. Davidson in 8½ hrs. The previous record is stated to have been held by the G.T.R. elevator there, by the removal of 77,000 bush. in 9¾ hrs. Since the foregoing the G.T.R. elevator has made a further record. In one day of 9½ hrs., 75,749 bush. was taken from the s.s. Robert Wallace, while at the same time 140,710 bush. was taken from cars, and 288,623 bush. loaded into ocean-going vessels, making a total of 505,082 bush. in one day.

The Western Canada Flour Mills Co., Ltd., has recently issued 6% first mortgage bonds, amounting to £225,000, due in 1928, in London, Eng. The company is an amalgamation of the Lake Huron and Manitoba Milling Co., Goderich, Ont., and the Kelly Milling Co., of Brandon, Man., and was incorporated under the Ontario Companies Act in 1905 It owns 66 elevators along the lines of the C.N.R. and C.P.R. in Ontario, Manitoba and Saskatchewan. The officers and directors are: President, A. Kelly; Vice-President and General Manager, S. A. McGaw; Secretary, A. J. Mitchell; other directors, Z. A. Lash, K.C.; D. B. Hanna, A. D. Davidson and J. Wright.

The Allan Steamship Line has recently made representations to the Minister of Public Works, regarding the provision of facilities for the shipment of grain at St. John, N.B. With the new wharves, which will be ready for use by the opening of the winter season, no facilities for grain shipments have been provided, and it is estimated that the construction of conveyors from the C.P.R. elevator to the new wharves would cost about $90,000. In this connection Hon. W. Pugsley recently stated: "In view of the probable large movement of grain through St. John during the coming winter, I have felt that it would be a serious detriment not only to St. John, but to the Canadian grain trade, if adequate facilities were not provided. I have therefore taken the matter up with the C.P.R., and plans and specifications are being prepared which will give me a close estimate of the cost, and in a very short time I expect to be in a position to complete arrangements for the commencement of work so as to provide these necessary facilities for next winter's business."

The Governor-General in Council has approved the Montreal Harbor Commissioners' amendments to by-laws relating to elevator charges at that port. The charges on grain ex steamer or barge, for elevating and weighing, are ¼c. a bush., and for storage for 20 days' including delivery to vessel, ¼c. a bush.; on grain ex cars, oats, elevating and storage for 10 days, ½c. a bush.; all other grain, elevating and storage for 10 days, ¾c. a bush.; succeeding terms of 10 days on all grain ex steamer, barge, or car, ¼c. a bush.; on export grain ex cars, elevating, 10 days' storage and delivery to ocean steamer through carrier or otherwise at the Commissioners' option, 9/10c. a bush.; loading on cars, $1 a car; cleaning grain, ½c. a bush.; turning grain, ⅛c. a bush.; floating grain from elevator to alongside steamer in harbor, ¾c. a bush.; for the winter storage from Nov. 15 to May 15, including elevating and delivery, when charges at regular rates amount to 1½c. a bush., no further charge will be made; grain stored during winter months remaining in the elevator after May 15, charged ¼c. a bush. for each succeeding 10 days or portion thereof in addition to charges already accrued; all grain subject to official inspection, and 40c. a car charged in addition to storage charges.

MARINE DEPARTMENT.

Notices to Mariners.

No. 64. July 22.—163. Atlantic Ocean, derelict reported. 164. Nova Scotia, southwest coast, off south end of Bon Portage Island, bell buoy replaced by whistling buoy. 165. Nova Scotia, south coast, Port Latour, buoys established. 166. Nova Scotia, south coast, Nixonmate shoal, bell buoy established.

No. 65. July 22.—167. Ontario, Canadian list of lights and fog signals, new edition. 168. Ontario, Georgian Bay, Parry Sound approach, Spruce shoal, gas-lighted beacon, gas buoy removed.

No. 66. July 25.—169. New Brunswick, east coast, Shippigan Gully, change in position of range lights. 170. Newfoundland, east coast, St. John's harbor entrance, Fort Amherst, change in fog alarm.

No. 67. July 28.—171. British Columbia, Chatham Sound, rock on northern side of Brown passage. 172. British Columbia, Dixon entrance, position and description of Celestial reef.

No. 68. July 30.—173. Ontario, Georgian Bay, Key Inlet, description, plan, beacons, buoyage, sailing directions.

No. 69. Aug. 4.—174. Ontario, Georgian Bay, Parry Sound, Three Mile Point, gas beacon established.

No. 70. Aug. 5.—175. New Brunswick, south coast, Bay of Fundy, Chignecto Channel, Cumberland Basin, Peck Point, fog alarm established. 176. Nova Scotia, Cape Breton Island, east coast, Sydney harbor,

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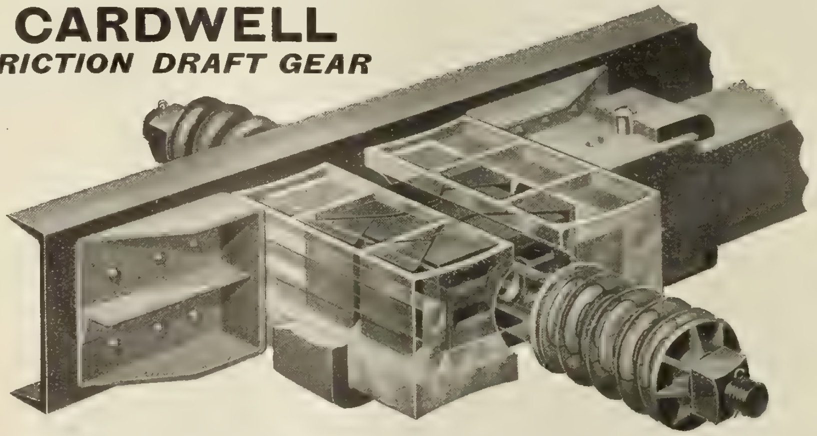

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SUBMARINE SIGNALS

Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says:

"Nearly all my sea life I have been looking forward to getting the assistance of a reliable sound signal. Now I feel that we have got it, and all that is required, in my opinion, is its universal application."

Full Particulars on Application to the

Submarine Signal COMPANY

BOSTON, MASS.

off southeast bar, gas buoy established. 177 Newfoundland, east coast, Notre Dame Bay, Fortune harbor, light established.

No. 71. Aug. 6.—178. Ontario, Lake Ontario, Kingston, light discontinued. 179. Ontario, Lake Erie, Detroit River mouth, wreck removed. 180. Ontario, Lake Huron, Goderich, lights improved, back light pole replaced by tower.

No. 72. Aug. 7.—181. New Brunswick, Bay of Fundy, Campobello Island, Head harbor, temporary light. 182. New Brunswick, Chaleur Bay, Miscou Island, Birch Point, intended change in character of light. 183. Nova Scotia, south coast, off entrance to St. Margaret Bay, Horseshoe Ledge, bell buoy established.

No. 73. Aug. 15.—184. Nova Scotia, Avon River, Mitchener Point, lighthouse established. 185. New Brunswick, east coast, Kouchibouguac Bay, Kouchibouguac River, range lights established.

No. 74. Aug. 18.—186. New Brunswick, St. John River, Wilmot Bluff light station, change in position of light, tower erected. 187. New Brunswick, Chaleur Bay, Miscou Island, Birch Point, temporary light. 188. Newfoundland, east coast, Notre Dame Bay, Leading Tickles, lighthouse established. 189. Newfoundland, east coast, Notre Dame Bay, Little Bay Island, lighthouse established.

No. 75. Aug. 20.—190. Quebec—River St. Lawrence, Red Islet bank, hydrographic information. 191. Quebec, River St Lawrence, ship channel between Quebec and Montreal, Port St. Francis, change in position of front range light, back range tower rebuilt.

No. 76. Aug. 22.—192.—Quebec, River St. Lawrence, Crane Island, lighthouse rebuilt. 193.—Quebec, River St. Lawrence, Cap Charles, lower back light discontinued. 194.—Newfoundland, Labrador coast, surveying marks, protection requested.

No. 77. Aug. 24.—195.—British Columbia, Chatham Sound, chart, southern approach to Prince Rupert harbor, and entrance to North Skeena Passage, issued. 196.—British Columbia, Chatham Sound, Skeena River, Middle Passage, hydrographic information.

The following notices have been issued by the U.S. Hydrographic Department:

No. 31. Aug. 1.—1289. St. Clair River, Sarnia, shoal, light buoy established.

◆

Vessels Removed from the Register.—The following vessels were removed from the register during July, for the reasons assigned: Steam, Aberdeen, Winnipeg, 26 tons, broken up; Bonito, Ottawa, 12 tons, broken up; Rambler, Port Arthur, 3 tons, broken up; Thomas Freel Battle, St. Catharines, Ont., 19 tons, burnt; Sailing: Bessie, Sydney, N.S., 20 tons, wrecked; Black Prince, Halifax, N.S., 18 tons, broken up; Dorothy M. Porter, Windsor, N.S., 168 tons, transferred to Nfld.; Edith R. Balcom, Lunenburg, N.S., 100 tons, wrecked; Fisher River, Winnipeg, 111 tons, broken up; Frank, Gaspé, Que., 54 tons, broken up; Fred Jackson, Liverpool, N.S., 198 tons, lost; Pleasantville, Liverpool, N.S., 98 tons, broken up; Ranger, Gaspé, Que., 14 tons.

LIST OF STEAM VESSELS REGISTERED IN CANADA DURING JULY, 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
Alanbee	126,088	Vancouver, B.C., 1908	Screw, 3 N.H.P.	35.9	10.1	5.2	15	10	Vancouver	R. P. McLennan, Vancouver, B.C.
Bessie Butler	122,564	Peterboro, Ont., 1907	" 20 "	78.0	17.6	....	77	52	Peterboro	Department of Railways and Canals, Ottawa, Ont.
Bob Hall	122,563	" "	" 16 "	49.0	12.6	....	27	18	"	Department of Railways and Canals, Ottawa, Ont.
Bon Ami	122,436	Manitowoc, Wis., U.S., 1902	" 24 "	105.0	24.5	8.0	245	142	Sault Ste. Marie	St. Joe Island and Sault Line, Ltd., Sault Ste. Marie, Ont.
Bonsel	122,449	Shelburne, N.S., 1908	" 1 "	35.9	7.6	3.0	6	4	St. John	G. E. Gandy & H. A. Allison, St. John, N.B.
Charlie Gilley	126,175	N. Westminster, B.C., 1908.	" 16 "	33.9	10.0	4.7	10	6	New Westminster	G. D. Brymner, New Westminster, B.C.
D. C. Whitney	122,435	St.Clair, Mich., U.S., 1882	" 88 "	240.0	40.0	22.0	1490	1290	Sault Ste. Marie	J. Ganley, Sault Ste. Marie, Ont.
Elsie M.	122,550	Collingwood, Ont., 1908	" 8 "	54.0	11.7	7.0	28	19	Collingwood	D. McInnes, Meaford, Ont.
F. N. McCrea	126,122	Kingston, Ont., 1908	" 3 "	47.8	11.0	5.0	19	10	Kingston	J. H. Davis, Kingston, Ont.
Fernie	126,099	....	" 5 "	37.6	8.4	3.3	8	6	Vancouver	D. Burns, Vancouver, B.C.
Geo. Emerson	122,437	Buffalo, N.Y., U.S., 1888	" 8 "	61.0	14.7	6.0	31	21	Sault Ste. Marie	T. Ganley, Sault Ste. Marie, Ont.
Glympse	126,124	Kingston, Ont., 1908	" 8 "	38.2	8.6	3.7	9	6	Kingston	J. H. Davis, Kingston, Ont.
Grande Ligne	126,153	Montreal, Que., 1907	" 24 "	67.3	18.1	8.3	70	38	Montreal	F. Lemoine, Montreal, Que.
J. C. Bruce	126,175	Vancouver, B.C., 1908	" 1 "	43.0	9.1	3.7	17	11	New Westminster	J. C. Bruce, New Westminster, B.C.
J. Howard	122,626	Newcastle, N.B., 1908	" 10 "	48.0	11.5	5.0	16	11	Chatham	T. W. Crocker, Newcastle, N.B.
Jeanne D'Arc	126,146	Sorel, Que., 1908	" 3 "	96.2	22.3	6.5	105	69	Sorel	A. Thiaville, Sorel, Que.
Kerland	126,172	New Westminster, B.C. 1907	" 25 "	39.5	8.9	4.8	11	7	New Westminster	W. J. Kerr & W. W. Irwin, New Westminster, B.C.
Klahum	126,202	Vancouver, B.C., 1907	" 1 "	31.5	9.0	3.6	11	7	Vancouver	E. D. Taylor, Vancouver, B.C.
Kobe	126,204	Steveston, B.C., 1908	" 3 "	41.0	10.0	4.1	15	10	"	H. Yamachita, Steveston, B.C.
Lady Sybil	85,406	Greenock, Scotland, 1908	" 173 "	165.0	28.1	18.7	676	352	Magdalen Island	Magdalen Islands Steamship Co., Ltd., Halifax, N.S.
Lib.	126,155	Montreal, Que., 1908	" 48 "	62.5	14.1	5.6	31	15	Montreal	T. Gauthier, Montreal, Que.
Little Ada	47,655	Renfrew, Scotland, 1863. Bay City, Mich, U.S., 1899.	" 24 "	112.0	18.1	16.2	236	122	Quebec	R. F. Grant, Three Rivers, Que.
Marion	122,527	Vancouver, B.C., 1907	" 3 "	36.0	9.0	4.5	13	9	Vancouver	Jervis Inlet Lumber Co., Vancouver, B.C.
Mina W.	126,174	Steveston, B.C., 1908	" 11 "	35.5	9.1	3.7	7	5	New Westminster	J. W. Wise, New Westminster, B.C.
Nipigon	117,090	Collingwood, Ont., 1908	" 6 "	56.8	9.6	7.0	36	24	Collingwood	L. Villeneuve & A. Robertson, Nipigon, Ont.
Noreensha	126,090	Vancouver, B.C., 1908	" 1 "	29.6	8.0	3.0	5	3	Vancouver	W. Farrell, Vancouver, B.C.
No. 26	124,261	Kirkintilloch, Scot., 1908	" 28 "	68.8	15.1	8.1	49	..	Quebec	J. Stewart & W. Fulton, Glasgow, Scotland.
Oscar C.	122,640	Kingston, Ont., 1908	" 4 "	47.8	10.9	5.0	18	9	Kingston	J. B. Oliver, Magog, Que.
P.M.A.	126,061	Egmont Bay, P.E.I., 1906	" ·18 "	37.5	12.5	5.2	15	12	Charlottetown	P. A. Arsenault, St. Chrysostome, P.E.I.
P.Mellon Flyer	126,203	Vancouver, B.C., 1908	" 3 "	37.7	10.8	4.8	15	10	Vancouver	G. E. Cates, Vancouver, B.C.
Pusher	122,630	Little Branch, N.B., 1903	Paddle, 3 "	28.0	10.0	2.0	15	9	Chatham	P. England, Chatham, N.B.
Rexton	122,625	Rexton, N.B., 1908	" 5 "	64.0	14.0	4.0	35	22	"	J. M. Burns, Rexton, N.B.
Schwalbe	126,108	Mahone Bay, N.S., 1908	Screw, 40 "	44.8	12.0	7.0	..	17	Lunenburg	B. A. Wentzell, Halifax, N.S.
Splash	122,628	Chatham, N.B., 1908	Paddle, 1 "	31.0	10.0	2.0	18	12	Chatham	P. England, Chatham, N.B.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING JULY, 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross Tons	Reg. tons.	Port of Registry.	Owners.
CityDredge No. 3	125,978	Toronto, Ont., 1908	Scow	110.0	30.1	7.3	......	306	Toronto	The City of Toronto.
Cluster	122,629	Rexton, N.B., 1908	Schr.	33.0	12.0	4.6	......	10	Chatham	G. Gallant, Rexton, N.B.
Crouzier B.	122,428	Chezetcook, N.S., 1908	"	50.0	16.9	6.0	......	26	Halifax	J. Bellefountaine, Chezetcook, N.S.
Excavator	122,627	Chatham, N.B., 1908	Dred.	38.0	13.0	3.0	......	13	Chatham	P. England, Chatham, N.B.
Fleetly	126,109	Bridgewater, N.S., 1908	Schr.	108.5	29.0	10.6	......	174	Lunenburg	S. Creaser, La Have, N.S.
General Laurie	126,182	Allendale N.S., 1908	"	112.6	29.2	10.5	......	198	Shelburne	W. MacMillan, Lockeport, N.S.
Georgia E	100,874	Cambridge, N.B., 1893	"	81.0	27.0	6.0	......	95	Weymouth	D. N. Messenger, Barton, N.S.
H.S.M.C.	126,201	Vancouver, B.C., 1906	Scow	83.0	28.9	6.8	......	155	Vancouver	B.C. Mills Timber & Trading Co., Vancouver, B.C.
Hilda Brannen	122,239	Port Clyde, N.S., 1908	Sloop	29.2	12.0	4.9	......	10	Barrington	W. N. Brannen, Woods Harbour, N.S.
Keene	122,562	Birdsalls, Ont., 1907	Barge	80.0	18.0	4.0	......	48	Peterboro	F. Burnet and J. D. Simpson, Birdsalls, Ont.
Kennebecasis	122,446	Gondola Point, N.B., 1907	Ferry	38.2	16.8	2.3	......	10	St. John, N.B	W. A. Pill, Gondola Point, N.B.
La Berard	126,154	Sorel, Que., 1907	Barge	103.7	22.6	14.5	......	233	Montreal	J. Berard, Montreal, Que.
M. O'Toole	122,186	Louisburg, N.S., 1908	Schr.	51.6	15.5	6.9	......	32	Arichat	V. O'Toole, Louisburg, N.S.
M. M. Mosher	126,107	Mahone Bay, N.S., 1906	"	90.8	23.4	9.8	......	73	Lunenburg	W. Duff, Lunenburg, N.S.
Vandyke	126,171	N. Westminster, B.C., 1907	Dred.	67.0	23.5	5.0	......	157	New Westminster	J. W. Pike, Vancouver, B.C.
W. F. Foley	122,581	Tusket Wedge, N.S., 1908	Schr.	69.0	19.6	8.0	......	51	Yarmouth	H. T. LeBlanc, Tusket Wedge, N.S.

Atlantic and Pacific Ocean Marine.

The Dominion Government s.s. Arctic left Quebec recently, in charge of Capt. Bernier, on a two years' cruise in Ungava and Baffin Bays.

The Allan Line s.s. Hesperian, arriving at Glasgow, Scotland, Aug. 10, created a record for the route, occupying 6 days, 8 hrs., on the voyage.

The Cunard Line s.s. Mauretania has been docked and will undergo a complete overhauling. It is said her speed will be increased to 27 knots.

Manchester Liners Ltd. has decided to place three additional vessels on the Canada-Manchester, Eng., route, and will probably inaugurate a weekly service.

The New Zealand Government has declined to renew its share of the subsidy granted to the Canadian-Australian line, as the service is considered of no value to New Zealand.

The s.s. Volturno, bound from Rotterdam to New York, put in at Halifax, N.S., Aug. 4 and landed the crew of the French fishing schooner Champagne, rescued in the open sea.

Press reports state that the Dominion Government will ask the C.P.R. and the Allan Line to join their steamship services and place five 25-knot vessels on what is termed the "all-red" route, under a subsidy.

The French Trans-Atlantic Co. has stated that, subject to the growth of trade between Canada and France warranting it, on the conclusion of the proposed treaty, it will inaugurate a direct line between the two countries.

The New Zealand Government has expressed its willingness to pay an annual subsidy of £75,000 for a British steamship service between Great Britain and New Zealand, by way of Canada, with 18-knot vessels, on the Pacific.

The Dominion Line s.s. Southwark, which sailed from Montreal Aug. 8, ran aground at Bras Point, near the Strait of Belle Isle, Aug. 11. She was released on the following day and proceeded on her voyage, the damage sustained being too slight to interfere with her passage.

As the result of recent negotiations the Allan, Atlantic, C.P.R., Dominion and Donaldson Steamship Lines have arranged to carry 10 Canadian school teachers on each vessel sailing to Europe after Sept. 1, as second-class passengers at the rate of $25 a head for the round trip.

The C.P.R. s.s. Empress of Britain occupied 6 days, 3 hrs., 25 mins., in the voyage from Liverpool dock to Quebec dock recently, this constituting a record run from port to port; while about the same time the Empress of Ireland, on the eastward trip, from dock to dock, took a little over 6 days.

H. G. Elliott, Assistant General Passenger and Ticket Agent, G.T.R., is reported to have said recently in Vancouver, on his return from Australia: "The probability is that ultimately the G.T. Pacific Ry. will have a service by water to the east, either independently or in connection with some line already in existence."

The International Mercantile Marine Co. recently purchased the Oceanic Steamship Co.'s s.s. Gothic, and has changed its name to Gothland. She will be operated in the service of the Red Star Line. She was built at Belfast, Ireland, in 1893, her dimensions being: Length, 490 ft.; breadth, 53 ft.; depth of hold, 33 ft.

The Cunard Line s.s. Lusitania created new trans-Atlantic records Aug. 20, when she completed the trip in 4 days, 15 hrs., the previous record being 4 days, 18 hrs., 40 mins. The average speed for the voyage was 25.05 knots an hour against 25.01, and the longest 24 hours' run was 650 knots, at an average of 25.66 knots an hour.

C.P.R. LANDS

THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00 " "
Map No. 5—South Western Alberta	8.00 to 15.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00 to 25.00 per acre.

All prices are subject to change without notice.

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160 Acres	at $	8.00	per acre,	cash payment	$191.70	first	year's	interest	$65.28	and nine	instalments of	$160.00
"	"	9.00	"	"	215.70	"	"	"	73.46	"	"	180.00
"	"	10.00	"	"	239.70	"	"	"	81.62	"	"	200.00
"	"	11.00	"	"	263.60	"	"	"	89.78	"	"	220.00
"	"	12.00	"	"	287.60	"	"	"	97.96	"	"	240.00
"	"	13.00	"	"	311.55	"	"	"	106.10	"	"	260.00
"	"	14.00	"	"	335.60	"	"	"	114.32	"	"	280.00
	"	15.00	"	"	359.50	"	"	"	122 44	"	"	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

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Arriving on Michigan Central Rd., Canadian Pacific Railway, at Victoria Park station—Hotel bus meets all trains, only three minutes' walk from station to hotel.

International Railway (trolleys), connecting with Niagara Navigation Co. steamers at Queenston, to or from Toronto, pass the door.

IMPORTANT

Guests coming to the Hotel should see to it that they are taken to The Clifton Hotel, CANADIAN SIDE, and also that their mail is addressed "Care of The Clifton Hotel, Niagara Falls, CANADA." To insure prompt delivery, don't forget to make CANADA plain in the address.

James Thomson, Pres. and Mang. Director. J. G. Allan, Vice-President. James A. Thomson, Secretary. Alex. L. Gartshore, Treasurer.

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The Allan Line s.s. Corean, which has been laid up for some time, having been superseded by more modern vessels, has been sold to foreigners. She was built at Sunderland, Eng., in 1881, with engines having cylinders 48 and 84 ins. diar., by 54 ins. stroke, of 432 n.h.p. Her dimensions are: Length, 360.1 ft.; breadth, 41 ft.; depth, 23 ft.; tonnage, 3,488 gross, 2,259 register.

The Union Steamship Co. of New Zealand's s.s. Makura was launched recently on the Clyde, Scotland, and it is anticipated that she will have a trial run during Sept. She has triple-expansion engines, capable of doing 18 knots an hour; her dimensions are: Length, 470 ft.; breadth, 58 ft.; depth, 35 ft.; tonnage, 8,000 gross. She will sail from Great Britain for Australia in Oct., and will make her maiden trip to Canada about March, 1909.

The C.P.R. s.s. Mount Temple, which was wrecked on Ironbound Island, N.S., Nov. 30, has been overhauled and repaired at Newport News, N.Y., and left the dry dock there recently for Montreal. The vessel, which was abandoned to the underwriters, was floated, April 15, by the Halifax Salvage Association. The method adopted was of considerable interest, as it was the first time such a course had been pursued on the Atlantic coast. The holds were all pumped out, made air-tight, and the vessel raised by means of compressed air.

It is reported that the Cunard Line intends to eliminate Queenstown, Ireland, as a port of call on the trans-Atlantic trip, in favor of Plymouth, Eng. There is no confirmation of this, nor is any likely. The Cunard steamships receive large subsidies from the British Government for conveying the mails, and Queenstown is specifically mentioned as the landing port for the mails, and so long as the subsidy grants are so made, so long will Queenstown be retained as a port of call.

As the result of a memorial from Victoria and Vancouver shippers, an enquiry is being held by the Deputy Minister of Trade and Commerce into the manner in which the Canadian-Mexican Steamship Line is being conducted. It is alleged that there is a discrimination against local shippers. The company receives an annual subsidy of $50,000 from the Dominion Government to maintain an efficient service for passengers, mails and freight between Canada and Mexico, making 12 trips a year.

A press report states that an experiment in the conveyance of freight from Japan to New York recently, resulted in C.P.R. landing its consignment first at the latter city. It is said that the C.P.R. s.s. Monteagle, the Japanese s.s. Tosa Maru, and the Pacific Mail s.s China, left Yokohama, Japan, together, each with a portion of a silk cargo, bound, respectively, for Vancouver, Seattle and San Francisco. The first-named reached Vancouver Aug. 4, the two others arriving at their ports on Aug. 6 and 7; and the C.P.R. making delivery in New York two days ahead of the others.

In connection with the recent report that the various transcontinental railways on the American continent had decided to withwithdraw their Pacific steamship services, Sir Thos. G. Shaughnessy, President of the C.P.R., is reported to have said: "Probably some of the transcontinental railways that established steamship connections on the Pacific Ocean in recent years, with announcements that they could afford to carry all sorts of heavy commodities from eastern centres to the Pacific coast and thence by steamship to Australia, China and Japan in competition with all-water routes, have discovered that policy was not a profitable one and are withdrawing. The C.P.R. has been engaged in the trade for 20 years, has not attempted to do the impossible, and will go right along in the same old way."

Maritime Provinces and Newfoundland.

The s.s. Arcadia has been undergoing extensive repairs at New Glasgow, N.S.

T. E. King, a well-known Nova Scotia shipmaster, died at Windsor, N.S., Aug. 18.

The s.s. Roebling has been undergoing repairs to her machinery and hull at Halifax, N.S.

The Washademoak Steamship Co. is said to be about to purchase a steamboat to replace the s.s. Aberdeen.

Tenders were received, Aug. 14, by the Public Works Department, for repairs to Dixon's Wharf, Grand Manan, N.B.

Tenders were received by the Public Works Department, Aug. 10, for the construction of a low water wharf at Burton, N.B.

Tenders were received by the Public Works Department, Aug. 21, for the construction of a wharf at McPherson's Cove, N.S.

Capt. W. Buchanan, formerly commander of the Pickford and Black s.s. Ocamo, died at Grand Pré, N.S., recently, aged 57.

L. D. Shaffner, Annapolis, N.S., recently launched his twenty-first vessel there. She is named C. D. Pickles, and is 450 tons register.

The Newfoundland schooners Victor, Mary Francis and Stella, anchored near Isle au Bois, were driven ashore during a gale Aug. 3, and became total wrecks.

J. McGill, Shelburne, N.S., launched a schooner named Albert J. Lutz there Aug. 6. Her dimensions are: Length, 102.6 ft.; breadth, 23 ft.; depth, 10.4 ft.

A schooner named Willena Gertrude was launched at Parrsboro, N.S., Aug. 12. Her dimensions are: Length, 132.1 ft.; breadth, 32.4 ft.; depth, 11.2 ft.; 271 tons register.

The King's wharf at St. John's, Nfld., collapsed recently, caused, it is stated, by the gradual decay of the piling. It is estimated the cost to replace it will be about $10,000.

The contract for repairing the Norwegian s.s. Ocean, which grounded near Sydney, N.S., recently, has been awarded to the Halifax Dry Dock Co., where she has been docked.

G. D. Campbell, Weymouth Bridge, N.S., is applying to the Governor-General in Council for approval of plans, etc., for a proposed addition to the wharf on the Sissiboo River there.

Contracts have been awarded to the Maritime Dredging and Construction Co. and the Dominion Dredging Co., for dredging work at Digby and Yarmouth, N.S., respectively.

It is reported that, as the result of the recent severe storm along the Labrador Coast, 34 schooners were wrecked and became total losses. No loss of life, however, occurred.

The Reid Newfoundland Co.'s s.s. Regulus is now undergoing repairs, a decision in the matter between the company and the underwriters in London, Eng., having been arrived at.

It is anticipated that dredging work will be undertaken at Courtenay Bay, St. John, N.B., shortly, should it be decided to make St. John the Atlantic terminal of the National Transcontinental Ry.

The Dominion Minister of Public Works recently stated that the plans and specifications for the proposed new Government wharf at St. John, N.B., were complete, and tenders would shortly be called for.

The Reid Newfoundland Co.'s s.s. Bruce, which recently ran ashore on Baldwin's Reef, Port aux Basques, has been released uninjured, after the removal of her cargo, and has resumed her sailings.

Three French fishing schooners, which left Cancale, France, for Newfoundland in March, and which have not since been heard of, have been given up as lost, together, with their crews, numbering 78 men.

The Dominion Government s.s. Lady Laurier has recently been engaged in the examination of gas buoys, etc., off the N.S. coast, and is now being utilized for the annual inspection of the east coast lights.

The schooner Alice Gertrude, owned by the Canada Sealing Co., Halifax, N.S., is offered for sale. She was built at La Have, N.S., in 1902, her dimensions being: Length, 83.4 ft.; breadth, 22.3 ft.; depth, 9.4 ft.; tonnage, 81 gross.

A schooner named King Josiah was launched at Parrsboro, N.S., recently, for J. Soley, Lower Economy, to be used between N.S. ports and the United States. Her dimensions are: Length, 98.1 ft.; breadth, 28.7 ft.; depth, 8.9 ft.; 147 tons register.

J. Mackenzie, a well-known deep sea captain of Nova Scotia, died at Halifax Aug. 2. He at one time commanded a vessel trading with India and China, and latterly was part owner of barques trading on the N.S. coast. He retired from active service in 1893.

The Governor-General in Council has ordered that the limits of the pilotage district of Pictou, N.S., as established Mar. 23, 1874, be extended to include Northumberland Strait, from Cape George, N.S., on the east, to Point Prim, P.E.I., on the west.

A considerable quantity of cargo from the Thomson Line s.s. Arcola, recently wrecked near St. Paul's Island, has been landed at North Sydney by the s.s. Amphitrite, which is continuing the work of salvage.

The U.S. schooner Maggie and May, of Gloucester, Mass., was run down during a fog off the Nova Scotia coast, Aug. 8, by the German training ship Freya, after which she immediately sank, 9 of a crew of 13, mostly of Newfoundland, being drowned.

J. Rainnie, keeper of the Green Island light in the Straits of Belle Isle, was found dead there recently, with a bullet wound in his head. The light not having been exhibited for several nights led to an investigation, with the foregoing result.

The steamboat Christine, at one time owned by Lord Strathcona, which was purchased by the Dominion Government last year, was recently in the Halifax dockyard, where her crew accommodation was increased and other repairs undertaken. She was subsequently attached to the Customs service.

The s.s. Pors, which ran ashore at Port Hood, N.S., early in Aug., was still high and dry on the beach at the end of the month, though several attempts had been made to re-float her. It is stated that before she can be moved, the sand in which she is embedded will have to be dredged out.

The Dominion Public Works Department has ordered a survey of the St. John River for 60 miles between Fredericton and Woodstock, N.B., to determine the extent and character of the shoals and rapids, with a view to the undertaking of the work necessary to make the river navigable between these points.

The Halifax Towboat Co. has acquired the steam tug Scotsman in England. She was built in 1903, and is a screw-driven vessel, with triple-expansion engines, capable of 11 knots an hour. Her dimensions are: Length, 112 ft.; breadth, 19 ft.; tonnage, 141 gross. She arrived at Halifax, N.S., by way of the Azores, Aug. 2.

The South Shore Steamship Co., St. John, N.B., is reported to be giving up business, and offering its steamship Senlac for sale. She is a wooden steamer driven by a screw, with engine of 66 n.h.p., built at St. John in 1904, her dimensions being:

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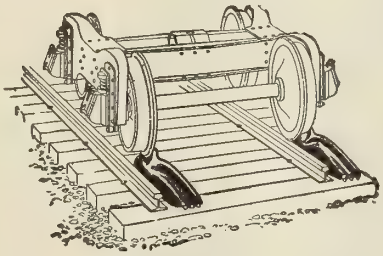

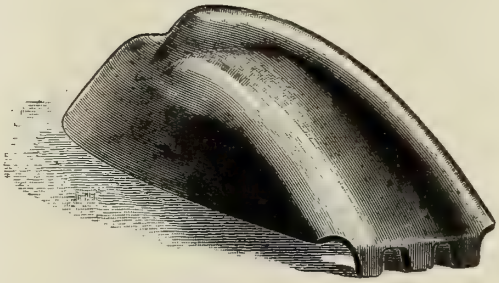

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Montreal—Quebec—Liverpool
Montreal to Avonmouth Docks
(Bristol and Antwerp)
LEYLAND LINE
Boston—Liverpool
Sailing from Boston Wednesdays.
RED STAR LINE
New York—London-via-Dover—Antwerp
Sailing from New York Saturdays.
WHITE STAR LINE
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41 KING ST. EAST, TORONTO.

length, 182.4 ft.; breadth, 33 ft.; depth, 16.1 ft.; tonnage, 1,011 gross, 615 register.

The Clifton Steamship Co. entertained a party of newspaper men on its new steamboat Premier, recently, with a trip on the Kennebecasis River to Rothesay, N.B., the route on which the vessel is to run. She was built at Clifton, N.B., in 1907, and is a paddle-wheel steamer, with engine of 4¼ n.h.p.; her dimensions are: Length, 64.9 ft.; breadth, 21.6 ft.; depth, 4.7 ft.; tonnage, 56 gross, 35 register.

The Lunenburg, N.S., schooner Mary A. Duff has been reported to be abandoned in a water-logged condition, with masts gone, about 900 miles east of Cape Sable. She left Lunenburg, Feb. 19, for Trinidad and, until the recent report, had not been heard of. There is nothing as yet to indicate the fate of the crew. She was built at Lunenburg in 1906, her dimensions being: Length, 94.9 ft.; breadth, 25.4 ft.; depth, 10.0 ft.; 90 tons register.

The Consolidated Steamship Lines, of which the Eastern Steamship Co., operating a steamship service between St. John, N.B., and Boston, Mass., is a subsidiary, has been reorganized, but owing to the large floating indebtedness of the Eastern Steamship Co., the plan does not expressly contemplate provision for its financial requirements. The reorganization committee, however, will acquire the stock of the company now held under the lien of the old mortgage, and reserves the right to transfer it to the new company to be used as security for a new bond issue, or for the general purposes of the company.

The s.s. Lady Sybil, which, as announced in our Aug. issue, has been chartered by the Interprovincial Navigation Co. to replace the wrecked s.s. Lady Eileen on the route between Campbellton and Gaspe ports, is owned by the Magdalen Islands Steamship Co., Halifax. She was built at Greenock, Scotland, quite recently, only arriving in this country this year; is designed to carry 415 tons on a mean draught of 11 ft., and was constructed to Lloyd's special survey and has a British Board of Trade passenger certificate. She is of the awning deck type, with two deck houses with 10 staterooms, and smoking room, wheel-house and captain's cabin above. The dining saloon is located aft, and on the main deck there are 6 staterooms, saloon and other cabins, with purser's office, pantry, galley, etc. There is accommodation for a total of 54 passengers. The machinery comprises electric lighting plant, steam steering gear, two winches, freight elevator, pumps, and triple-expansion engines, with cylinders 16, 26½ and 43 ins. diam., by 30 ins. stroke, supplied with steam from a boiler 15 ft. by 11.6 ft., fitted with forced draught. Her dimensions are: Length, 165 ft.; breadth, 28 ft.; depth, moulded, 12.3 ft.

Province of Quebec Marine.

J. Scott has been appointed harbormaster at Cape Cove, Que.

The Department of Railways and Canals received tenders Aug. 31 for concrete walls, and for the widening of the Lachine Canal.

Work on the construction of a dam above the Chaudiere Falls was commenced Aug. 8. The contract, about $250,000, is in the hands of Quinlan and Robinson, Montreal.

J. Cuttle, General Manager Montreal Transportation Co., sailed from Montreal Aug. 13 for England on business. He expects to return towards the end of September.

Press reports state that negotiations are in progress for a change in the control of the Montreal Transportation Co., but officials of the company say that there is nothing in it.

The Governor-General, accompanied by the Minister and Deputy Minister of Railways and Canals, started Aug. 18 on a trip of inspection over St. Lawrence and other canals in the Government s.s. Speedy.

The memorial to the late Hon. J. Young, the founder of Montreal as the national port of Canada, is now completed and in position. The official unveiling, which was to have been performed in June by the Governor-General, has been postponed until the fall.

The Quebec and Levis Boards of Trade, and the Quebec Manufacturers' Association, have prepared a number of suggestions to be submitted to a meeting of the Quebec and Levis Ferry Committee, in connection with the renewal of the ferry contract, to be held Sept. 8.

A winding-up order in the matter of the Quebec Navigation Co. was made in the Quebec Courts Aug. 19, on the company's petition. The liabilities are given as $16,000, including $8,000 due on the purchase of the s.s. Persia. V. E. Paradis, Quebec, was appointed provisional guardian.

The Montreal Harbor Commissioners have decided to place an up-to-date fire boat on the St. Lawrence for the protection of shipping in the harbor. A meeting is being arranged with a committee of the city council to discuss the question as to whether the city should bear a portion of the cost.

R. Bacquet, President of the Quebec Corporation of Pilots, who piloted H.M.S. Indomitable up the St. Lawrence channel on the occasion of the recent Quebec Tercentenary celebrations, was summoned on board that vessel prior to its departure, and personally thanked for his services, and presented with a souvenir pin by H.R.H. the Prince of Wales.

The Magdalen Islands Development Co., Montreal, is being wound up under an order of the Quebec Courts. The company was incorporated in 1907, with an authorized capital of $2,000,000, equally divided as to common and preferred stock, and a bond issue of $500,000. It had power to engage in a general navigation business in addition to a number of other undertakings.

The Minister of Public Works was present at the recent sale of the Carrier, Laine Co.'s property at Levis, when the property was bought by the Bank of Montreal for $380,000. This has given rise to the rumor that the Bank of Montreal was acting on behalf of the Dominion Government, which is credited with the intention of using the works as a marine machine shop for the repair and building of Government vessels.

A press report states that F. W. Cowie, who holds the position of Chief Engineer of the St. Lawrence Channel, as well as that of Chief Engineer to the Montreal Harbor Commissioners, is to relinquish the former post and devote his whole time to the duties of the latter, which position has increased considerably in importance of late. V. Forneret, Assistant Engineer, has been named as Mr. Cowie's successor as Chief Engineer of the St. Lawrence Channel.

The harbor returns of Montreal for July show a decrease in revenue, as compared with July, 1907, but for the season up to July 31, there is an increase of $9,009.26, as compared with the same period last year. During the period ended July 31, 362 steam vessels of a total of 923,677 tons entered the port, against 350 of 910,972 tons for the same period last year. The revenue for July is as follows:

	1908	1907
Imports	$ 33,000.00	$ 38,000.00
Exports	15,000.00	11,500.00
Local traffic	3,649.42	6,173.75
	$ 51,649.42	$ 55,673.75

For period ended July 31:

	1908	1907
Imports	$ 93,000.00	$ 99,500.00
Exports	34,000.00	18,500.00
Local traffic	14,360.13	14,350.87
	$141,360.13	$132,350.87

Hon. L. P. Brodeur, Minister of Marine, accompanied by F. W. Cowie, Chief Engineer of the St. Lawrence ship channel, and a large party representing the Shipping Federation of Canada, Montreal Harbor Commissioners, Quebec Harbor Commissioners, Quebec Board of Trade, etc., opened the Beaujeau channel for traffic July 29. The removal of the Crane Island Flats, long a hindrance to the navigation of the channel, has been accomplished, and a depth of 30 ft. at extreme low tide obtained. The work was commenced July 29, 1906, and it is estimated that 1,000,000 cubic yards of clay and sand has been removed, at a cost, including the purchase of a dredge, of about $1,000,000. For the guidance of navigators a new range of light buildings has been erected on Goose Island, to be known as the Hospital Rock range, and acetylene gas buoys installed at various points.

Ontario and the Great Lakes.

The Northern Navigation Co.'s new steamship, now under construction, will be named Pacific.

The dredging of Cobourg harbor is being proceeded with, the Hamilton dredge Chief being engaged on the work.

Following the recent grant of $5,000 for the construction of a dock at New Liskeard, a dredge has been put to work to clear the channel.

Gore Bay has been created an outport of customs and warehousing port, under the survey of the port of Sault Ste. Marie, by order of the Governor-General in Council.

The Niagara Navigation Co.'s steamboat Chicora, after having her machinery overhauled at the Polson Iron Works, Toronto, was again placed in regular service early in August.

By order of the Governor-General in Council the name of the steamboat Ojibway, registered at Toronto, no. 100,038, described in the Canada Gazette as a "schooner," has been changed to Jasmine.

The U.S. steamship Daniel B. Meacham, from Ashtabula to Port Arthur, with coal, ran on the rocks at Passage Island recently, during a fog. She was subsequently floated and arrived in port under her own steam. Apart from two holes in her hull there was no damage.

Imperial Service Medals for long and meritorious service have been granted to J. Brydges, lock laborer, Cornwall Canal; M. Corcoran, Lockmaster, Welland Canal; C. Milne, lock laborer, Rideau Canal; and J. B. Turcotte, seaman at Grosse Isle quarantine station, Que.

The Rideau Houseboat Association, Ltd., has been incorporated under the Ontario Companies Act, with a capital of $5,000, and office at Kingston, to manufacture, buy and sell, and deal in houseboats and kindred craft. The provisional directors are, W. A. Hirsch, W. F. W. Veysey, and I. Niner, New York City.

The Western Steamship Co.'s s.s. J. A. McKee was launched at Wallsend-on-Tyne, Eng., recently. The christening ceremony was performed by the wife of one of the directors of the building company, acting for the daughter of Capt. W. J. Bassett, of Collingwood. Full description of the vessel was given in our June issue.

The shareholders of the Northern Navigation Co. of Ontario, at a special meeting in Toronto, Aug. 19, approved two by-laws

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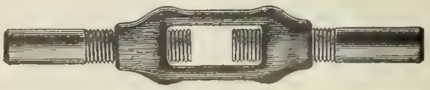

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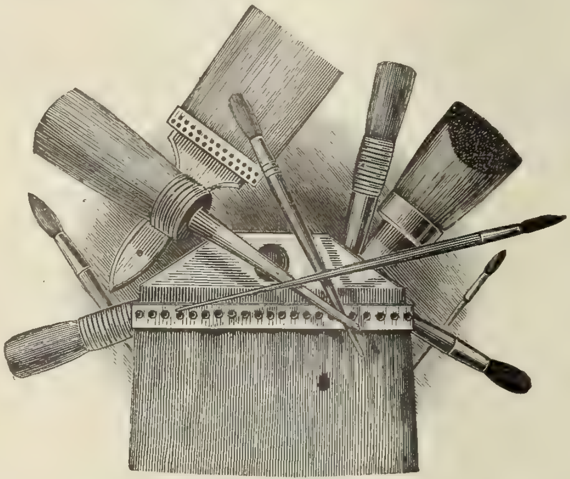

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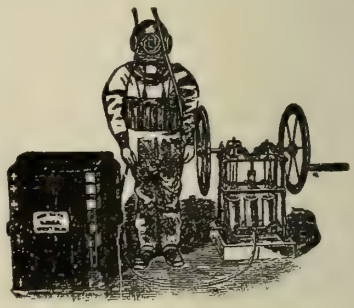

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passed by the directors, one authorizing them to borrow money from any chartered bank for the purpose of transacting the company's business, the other authorizing the borrowing of $500,000 by an issue of 5% bonds, to be secured by a mortgage on the company's vessels, including the one now under construction at Collingwood. It is expected the bonds will yield the company between 92 and 95.

The old schooner Erie Belle was destroyed by fire recently in Chippewa Creek, where she has lain dismantled for twelve years. After unloading on her last trip in 1896, the crew went on strike for unpaid wages at La Salle, and the captain sailed her to Chippewa, where she was seized at the instance of the mortgagees and subsequently sold to a firm of contractors who intended changing her to a scow, but abandoned the idea. She was built in 1873 at Port Burwell, her dimensions being: Length, 125.5 ft.; breadth, 24.4 ft.; depth, 9.8 ft.; tonnage, 275 register.

Manitoba, Saskatchewan, Alberta, Etc.

The name of the customs outport of Krahn, Man., has been changed by order of the Governor-General in Council to Haskett.

It has been recently stated that dredging work is to be undertaken shortly at Boundary Creek, Lake Winnipeg, with the intention of creating a harbor there. The Dominion Public Works Department has voted $7,500 for the work, and it is said the Government will be asked for a grant towards the construction of a pier at that point.

The Dominion Fish Co.'s s.s. Premier was destroyed by fire Aug. 6, at Warren's Landing, Lake Winnipeg, and eight lives were lost, mostly those of passengers. It is stated that the vessel was caught in a storm and was driven on the rocks, where she keeled over and took fire. She was built at Selkirk, Man., in 1896, and was a screw steamer, with engine of 32 n.h.p. and of the following dimensions: Length, 126 ft.; breadth, 22.9 ft.; depth, 8.9 ft.; tonnage, 414 gross, 282 register. A sister ship, the Princess, was wrecked last year, and several lives were then lost.

The St. Andrew's lock and dam now being constructed near Winnipeg, is situated at the foot of St. Andrew's rapids in the Red River, 21½ miles below the city. The rapids extend for about 10 miles above the lock, the fall in that distance being 15 ft. Navigation in this part has been restricted to shallow draft boats, and only at periods of high water. By means of this dam the water level will be raised 21 feet above low water elevation, flooding out the rapids in the vicinity of Winnipeg. The dam, which is 800 ft. long between abutments, consists of a sub-structure built of concrete, and a superstructure or movable dam operated from a steel service bridge, by which control is kept on the upper water, maintaining it at a level of 21 feet above the water in the lower reach. The construction of a movable dam was found necessary so that surplus water could be carried off without flooding the surrounding country. This movable dam will be the first constructed in Canada, the type being a combination of existing dams now in operation in Europe. The service bridge from which the movable dam is operated is carried over the permanent dam by means of five piers about 134 ft. apart, and frames are lowered by means of travelling cranes, the lower end of the frames resting on cast steel sockets embedded in the concrete dam. Rolling curtains are lowered on the steel frames and the water raised to the desired level. Provision is also made to carry a highway bridge over the service bridge.

B.C. and Pacific Coast Marine.

The Union Steamship Co.'s s.s. Cariboo has recently arrived at Victoria, B.C., from Great Britain. Her dimensions are: Length, 163 ft.; breadth, 32 ft.; depth, 23 ft.

The Pacific Coast Fisheries, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $300,000, to carry on a general fisheries business, and in connection therewith to construct, purchase and operate steam and other vessels.

The Prince Rupert Whaling Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $400,000, to carry on a general whaling business, etc., and in connection therewith to own and operate steam and other vessels, and to act as general carriers, wreckers, etc.

The B.C. Marine Railways Co., Victoria, has deposited plans of a new wharf extension and marine railway which it is proposed to construct at Esquimalt, in connection with the company's present plant there, with the Dominion Government, and is asking approval for the same.

The Dominion Department of Agriculture is offering for sale by tender the Government quarantine steamship Earl, now lying off William Head, B.C. She is a screw-driven vessel with engine of 21 n.h.p.; was built at Vancouver, B.C., in 1890, and is of the following dimensions: Length, 72 ft.; breadth, 16 ft.; depth, 7 ft.; tonnage, 75 gross, 50 register.

The Queen Charlotte Islands and Jedway Syndicate, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000, to carry on a general mining, dredging, and refining business, and in connection therewith to own and operate steam and other vessels, wharves, docks, etc., and to carry on the business of carriers by land and water.

The Terminal Steam Navigation Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $200,000, to purchase and take over the property and good-will of the Terminal Steamship Co., Ltd.; to purchase, build or otherwise acquire steam and other vessels and operate same for the conveyance of mails, merchandise, passengers, etc.; to acquire shore rights, wharves, piers, docks, elevators, etc., and to carry on the business of shipowners, shipbuilders, wharfingers, forwarding agents, underwriters, and general carriers by land and water.

Marine Votes for 1908.

In addition to the amounts given on pg. 373 of our May issue, and pg. 597 of our Aug. issue, the Dominion Parliament, at its recent session, voted the following sums for various services connected with the marine interests. The votes have been made in connection with the Department of Railways and Canals, Public Works, Marine and Fisheries, and Trade and Commerce, and include sums voted on capital account.

STEAMSHIP PURCHASE OR CONSTRUCTION.

Further amount required for repairs to cruiser Princess	$ 20,000.00
Purchase of gasolene launches for British Columbia (revote)	4,000.00
Construction and completion of steamer for Pacific coast hydrographic survey (revote)	45,750.00
Purchase or construction of steamer for Gulf and River St. Lawrence hydrographic survey to replace La Canadienne	50,000.00
Dominion steamers, further amount required, including repairing damages to Montcalm	100,000.00
Towards cost of steamer to replace Lansdowne for Bay of Fundy service	75,000.00
Purchase or reconstruction of steamer to replace Osprey	25,000.00
Purchase or reconstruction of steamer to replace Georgia	20,000.00

DREDGING PLANT, ETC.

New plant for Maritime Provinces	$ 300,000.00
" " Ontario and Quebec	200,000.00
" " Saskatchewan & Alberta	30,000.00
" " British Columbia	150,000.00
Dredging work, Maritime Provinces	350,000.00
" " Ontario and Quebec	300,000.00

LIGHTHOUSES AND LIGHTSHIPS.

Lighthouses, maintenance and repairs	80,000.00
Lightkeepers, salaries, etc	30,000.00
British Columbia trail, further amount	40,000.00
Repairs to Gaspe coast maritime road	2,000.00
Limekiln Crossing—To charter steamers for patrolling channel, further amount	10,000.00
For the purchase of land, etc., at St. John, N.B., for the Marine Departm't	50,000.00
Maintenance and upkeep of dockyards	10,000.00
Pilotage, further amount required for administration	1,550.00
Amount required to pay pensions	3,600.00
Signal service at Grosse Ile, L'Ilet and Amherst Island	1,000.00
Point Pelee, for establishing and maintaining a lightship	30,000.00

OCEAN AND MAIL SUBVENTIONS.

Mail service, Great Britain and Canada	412,500.00
Service between Canada and Australia	180,509.00
Service between Canada, Japan and China, additional	48,666.66
Additional amounts for various services between ports in the Maritime Provinces and Quebec	13,850.00

HARBOR AND RIVER WORKS.

Annapolis, N.S., additional for harbor	25,000.00
Digby, N.S., additional for repairs, etc.	30,000.00
Summerside, P.E.I., breakwater (revote, $19,000)	25,000.00
Charlottetown, P.E.I., harbor	40,000.00
Levis, Que., deep water harbor	50,000.00
Three Rivers, Que., deep water coal wharf	20,000.00
Burlington, Ont., channel piers improvement	30,000.00
Little Current channel, Ont., improvements	50,000.00
Victoria Harbor, Ont., improvements	75,000.00
Tiffin, Ont., harbor improvements	50,000.00
Fraser River, B.C., ship channel, improvements and protective works	100,000.00
Piers and wharves, repairs and other improvements at 21 points in P.E.I.	65,650.00
Ditto, at 146 points in Nova Scotia	293,410.00
Ditto, at 41 points in New Brunswick	217,200.00
Ditto, at 124 points in Quebec	492,030.89
Ditto, at 78 points in Ontario	282,905.93
Ditto, at 5 points in Manitoba	22,500.00
Ditto, at 3 points in Sask. and Alta.	27,000.00
Ditto, at 24 points in British Columbia	147,584.85
Lewes and Yukon Rivers, additional	2,500.00

CANALS.

BEAUHARNOIS.—Repairs to dykes	$ 12,000.00
CARILLON.—Dam across slides (revote)	140,000.00
CHAMBLY.—Rebuilding office	800.00
CORNWALL.—Land damages	495.00
Plan and boundaries	500.00
To pay interest for six years on deferred purchase of stone	2,386.09
Gate lifter	500.00
Repairs to break in bank	150,000.00
LACHINE.—Gatebars (revote)	2,500.00
To pay loss of horse	225.00
Wall, St. Gabriel basin	325.00
Raising shed, St. Gabriel basin	2,750.00
Bridge, St. Elizabeth St.	30,000.00
NORTH CHANNEL.—Final estimate	5,000.00
RIVER ST. LAWRENCE.—Removing of shoals west of upper entrance Galops Canal, (revote $20,100)	34,000.00
ST. ANNE'S LOCK.—Gatebars (revote)	200.00
ST. OURS LOCK.—Gatebars (revote)	250.00
ST. PETER'S.—Rebuilding and extending lock	25,000.00
SOULANGES.—Gate lifter (revote)	12,000.00
Gatebars (revote)	500.00
Gratuity to widow of J. Bermingham.	141.68
TRENT.—To pay damages to properties caused by flooding	100,000.00
WELLAND.—Surveys	10,000.00
Dredging slides	30,000.00
Dock south of Welland	45,000.00
Port Colborne elevator staff	8,000.00

MISCELLANEOUS.

Compensation to W. Paul, jr., injured in Champlain-Prefontaine collision	$ 7,000.00
Gratuity to mother of Jos. Carbonneau, killed in service of Marine Department	500.00
Rewards for saving lives at wrecks	8,000.00
Investigations into wrecks, additional	3,000.00
Tidal service, further amounts required	2,000.00
Steamboat inspection, further amount	3,600.00
Immigrant shed, North Sydney, N.S.	2,000.00
St. John, N.B., Partridge Island quarantine station, additional for building	3,400.00
Quebec: Improvements, renewals, etc., at carpenter's shop, Marine Department Agency	3,000.00
Quebec: To pay C.P.R. for account of alterations at Louise Embankment immigrant buildings	11,649.93

Dominion Canal Statistics.

The canal statistics for 1907, prepared by J. L. Payne, Comptroller of Statistics, recently issued by the Department of Railways and Canals, show that the waterborne traffic of the Dominion was the largest on record. The total aggregated 20,543,639 tons, as compared with 10,523,185 tons in 1906, an increase of 95.2%. The increase during 10 years was 210.4%. The principal increase was in the business of the Sault Ste. Marie Canal, which showed an increase of 5,601,943 tons over 1906; the total amount of traffic for 1907 being 12,175,982 tons, whereas in 1898 it was 2,757,937 tons. Of the total traffic passing through the Sault Ste. Marie Canal in 1907, 2,288,349 was Canadian and 9,887,633 tons U.S. tonnage; the former showing an increase of 467.3%, and the latter 315.6%, over the figures for 1898. The number of

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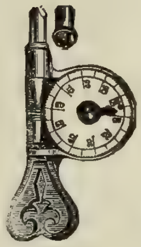

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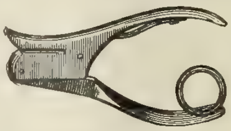

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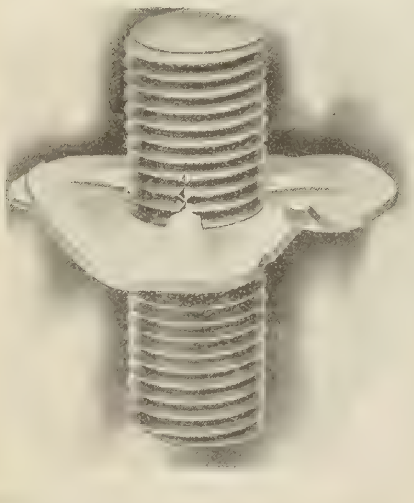

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vessel passages for 1907 was 6,153, compared with 3,712 in 1898, an increase of 65.7%, which, when compared with the increase in tonnage, shows that the carrying business of the upper lakes is developing a much larger type of vessel. The foregoing figures relate to the traffic passing through the Canadian canal alone, the combined tonnage passing through both canals, each of which is utilized by Canadian and U.S. vessels alike, was 70,393,196 tons. For the current year a change in the method of recording statistics is being adopted, the record of purely Canadian cargoes will be kept distinct from those of the U.S., on all Dominion canals.

Tonnage passing through the Dominion canals:

	1906 Tons	1907 Tons
From Canadian to Canadian ports	3,594,784	4,196,891
From Canadian to U.S. ports	862,013	1,117,830
From U.S. to U.S. ports	4,586,764	13,052,837
From U.S. to Canadian ports	1,479,624	2,176,081
Totals	10,523,185	20,543,639

There was a capital expenditure for the year ended Mar. 31, 1907, of $91,734,718.21, apart from the outlay by the Imperial Government, the records of which were destroyed by fire in 1852. Following are details of the expenditure:

St. Peter's	$ 648,547.14
Lachine	11,597,750.78
Beauharnois	1,636,690.26
St. Lawrence river and canals	3,311,840.80
Lake St. Louis	298,176.11
Lake St. Francis	75,906.71
Cornwall	7,224,284.70
Williamsburg. Farran's Point Galops Rapide Plat Williamsburg	10,373,311.29
Welland	27,275,869.40
Ste. Anne's	1,170,215.63
Carillon and Grenville	4,182,092.96
Culbute	382,776.46
Rideau	4,085,889.21
St. Ours	121,537.65
Chambly	637,056.76
Murray	1,248,820.26
Trent	5,430,488.66
Tay	489,599.23
Sault Ste. Marie	4,639,180.62
Soulanges	6,904,683.58
Total	$91,734,718.21

The total revenue, exclusive of hydraulic rents, was $456,781.86, against $379,549.70 for 1906. Passage through the Sault Ste. Marie canal is free.

◆

Beeson's Marine Directory.—The volume of this standard directory of the marine interests of the Great Lakes, for 1908, being the twenty-second annual volume, has been issued. The book contains all the features which have in times past made it necessary to all connected with the lake marine, and devotes 15 pages to a new feature, viz., a descriptive list of all U.S. ports on the Great Lakes. The list of Canadian vessels operated on the Great Lakes and tributary waters, has been carefully compiled from information gathered from various sources, the Editor mentioning among others The Railway and Marine World as having furnished "much that is of value in the compilation of this vessel list." The illustrations, as usual, form a feature of the volume, and this year they include: Drawings showing the dimensions of the locks on the Canadian canal systems; the power lifeboat built in the United States for the Banfield Creek life saving station, B.C., and the s.s. Carleton, built in Scotland for F. E. Hall & Co., Montreal.

During June, 4 men were killed and 12 injured in the course of their employment in navigation in Canada. Three of the fatalities were due to drowning and 1 to a fall. Of the non-fatal accidents, 4 each were due to falling materials, to falls, and 2 each to an explosion of gasolene and to machinery.

The Ottawa-Trold Collision.

Commander O. G. V. Spain, R.N., Dominion Wreck Commissioner, assisted by Capts. C. Koenig and J. Bain, held an enquiry recently into the causes of the collision between the Dominion Line s.s. Ottawa and the Norwegian s.s. Trold, May 10. The following judgment has been delivered, from which Capt. C. Koenig dissents: The s.s. Ottawa appears to have taken her departure from Fame Point and steered her course so as to pass through Cabot Straits, as was customary; this course was maintained and at no time altered, bright lookouts being kept; the weather was clear till 8.55 p.m., when it became hazy; the master of the Ottawa was at once promptly called, the engine room telegraph being put to standby; shortly after this, about 9.10 p.m. approximately, the weather became thick and foggy, the engines were slowed, the lookouts were doubled, and every possible precaution taken to avoid danger of collision, thus complying with art. 16 of the International Rules of the Road. Hearing a sound signal—one long blast—one or two points on the port bow, the engines of the Ottawa were stopped and reversed to stop the way of the vessel; at no time was the control of the Ottawa lost; she was kept directly on her course, blowing one long blast at intervals. Approximately at 9.30 p.m., the first sound signal from the s.s. Trold was heard—one long blast; shortly after this the collision took place. The court viewed the damage done to both vessels after the disaster, and found that the stem and bow plating of the Ottawa were intact and without a mark; abaft this the plating and frames are torn away and curled inboard. Therefore, the court deduces that the angle at the point of contact was small, the vessels clearing each other by backing. Had the Ottawa ported without seeing and knowing the position of the other vessel she would inevitably have been struck amidships in the most vulnerable point, and as she was carrying passengers, probably with very large loss of life. The court considers that the master and officers of the Ottawa acted judiciously, and did all they could for the safe navigation of the vessel. The s.s. Trold was bound from Sydney to Montreal with coal. It appears from the evidence that this vessel had been navigating in foggy and thick weather at full speed for some considerable time before the disaster occurred; it also appears that the Trold was not under control for some seven minutes; this the court views with dismay, as no seaworthy vessel should be uncontrollable for this period of time, unless her engines or steering gear are broken down; she was not kept on her course as proper seamanship would dictate, until the position of the other vessel was ascertained, but from the evidence, was allowed to fall off her course. The Trold, in the opinion of the court, was not properly manned; the chief engineer, who was on watch at the time of the collision, was alone in the engine room, and it is impossible for one man, without assistance, to attend to the many and various duties in the engine room of a large vessel when she is under way. There is no doubt that when those on board the Ottawa heard the first long blast from the Trold, she was on the Ottawa's port side, and had the officers of the Trold maintained control of their vessel and kept her on her course at a reasonable speed, the collision in all probability would not have occurred. The court therefore considers the master and officers of the s.s. Trold to blame for the collision.

In dissenting from this judgment, Capt. Koenig remarks: The Trold was on her way from Sydney to Montreal. It was proved that she was steering badly, and when her engines were stopped she did not steer unless she went through the water from 5 to 6 knots an hour. I find that the officer in charge of the Trold before and at the time of the collision did not comply with art. 16 of the International Rules of the Road, which reads as follows:

> "SPEED OF SHIPS TO BE MODERATED IN FOG.
>
> "Speed Restricted in Fog.—Art. 16.—Every vessel shall, in a fog, mist, falling snow, or heavy rain storms, go at a moderate speed, having careful regard to the existing circumstances and conditions.
>
> "A Steam Vessel to stop if another Vessel Signalling Forward of Her Beam.—A steam vessel hearing apparently forward of her beam, the fog signal of a vessel, the position of which is not ascertained, shall, so far as the circumstances of the case admit, stop her engines, and then navigate with caution until danger of collision is over."

Under such circumstances, when a ship steers badly, it is the duty of the officer in charge to go slowly, so as to keep his own vessel under control, so she can steer. Sometime before the collision, it was proven that the Trold was uncontrollable, because she would not steer; her helm was hard aport and she was canting to port. The officer in charge should have kept headway on his vessel, so as to throw her head to starboard, instead of letting her cant to port and losing control of her, according to the evidence given. Therefore, the officer in charge failed to comply with art. 16 above mentioned, in not having navigated his ship with caution until danger of collision was over. It was also proved that the whistle of one long blast of the Ottawa was heard right ahead two or three times, and once on the starboard bow; the latter sound was heard on the starboard bow because she had canted to port. According to the long blasts with intervals the officer in charge should have complied with art. 18, to avoid collision, which article reads as follows:

> "Steam Vessels Meeting.—Art. 18.—When two steam vessels are meeting end on, or nearly end on, so as to involve risk of collision, each shall alter her course to starboard, so that each may pass on the port side of the other."

The hearing of the whistle of the Ottawa on the starboard bow of the Trold has proved that the Trold had canted and was canting to port, as none of the witnesses from the Ottawa said that the whistle of the Trold was heard from the starboard bow of the Ottawa; if the officer in charge of the Trold had complied with art. 16, above mentioned, keeping control of his ship, so as to navigate with caution, and also with art. 18, as to the whistle which was heard from right ahead, he would have kept the helm hard aport and the engine slow ahead, and he would thus have passed clear of the Ottawa. In my opinion the Trold was not properly manned. It was proved by the chief engineer of the Trold, who was on watch at the time of the collision, that he was alone in the engine room to attend to the engine telegraph bell, greasing of the engine, looking after the pumps and the firemen, writing the movements of the engine on the blackboard; in my opinion it is impossible for one man, without assistance, under such circumstances, to properly obey the orders given to him from the bridge through the telegraph bells, especially in narrow water. The s.s. Ottawa was on the way from Montreal to Liverpool loaded with general cargo. I am glad to say that she was well equipped and well manned, with good discipline on board. According to the evidence given by the captain, the officer in charge of the bridge and two lookout men, they heard a prolonged blast three times, with an interval of 30 seconds to 1 minute between each blast, on the port bow of their own ship. It was also proved that those long blasts were answered by the Ottawa by long blasts. The captain, knowing that the blasts came from a steamer which was on the port bow, and also having answered the same by long blasts from the Ottawa, he did not comply with art. 18, to avoid collision as above mentioned. His ship was steering well, had a good steering-way on her; to avoid collision he should have altered his course to starboard, where she had ample room to do so, so that each ship would have passed on the port side of the other. My opinion of the collision, after all the evidence given by the witnesses is taken into consideration, is that both ships are to blame, according to the articles of the International Rules of the Road as above mentioned.

Commander Spain comments on the dissenting judgment, as follows: The judgment of the court in this case is not agreed with by one of the Assessors, Capt Koenig; the other Assessor, Capt. Bain, agrees with the court. I shall therefore read the opinion of the court and also the opinion of the dissenting Assessor. Arts. 18 and 28 of the International Rules of the Road, quoted by Capt. Koenig, in the opinion of the court have nothing to do with this particular case,

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JOS. E. SEAGRAM, M.P., President
W. P. FRASER, Sec'y and Treas.

as they only apply when vessels are in sight of each other. This was practically proven in a collision which occurred some years ago between the s.s. Vancouver and s.s. Lake Ontario, and the court judged the Vancouver to blame for having ported her helm in response to a supposed steering signal when approaching vessel or lights could not be seen. In the opinion of the court the s.s. Ottawa would not have been justified in changing her course until she had ascertained the position of the other vessel. The court is of the opinion that the Ottawa complied with art. 16, which is the only article pertinent to the case in question.

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The Lake Champlain Route.

A. B. Fry, a member of the Board of Consulting Engineers, New York State Canals, read a paper on "A Consideration of the Champlain Canal and its Canadian Possibilities," at a conference on waterways, held recently at Albany, N.Y. After reviewing the development of the Hudson Valley and Lake Champlain water route connecting the ocean at New York with Canada, Mr. Fry proceeds to consider what it is proposed to do and what has been done on the Champlain under the Barge Canal Act, which became effective in 1904. The work comprises the construction of 10 locks, excluding the Troy lock, with a total lockage of 183.5 ft. from Albany to the lake, various works of river improvement, and new canal construction. Of the contracts which comprise this work, six, covering about 34 miles of river improvement and canal line, are well under way, and it is expected that within about three years it may be possible for a vessel of say not over 15 ft. freeboard, 11 ft. draft, not over 42 ft. beam, and 300 ft. long, to proceed from New York City to the head of Lake Champlain at Rouse's Point. Without considering the Canadian side of the question vast possibilities of trade expansion were opened up. The locks being constructed are 328 ft. long, 45 ft. wide, and have a depth of water of 12 ft., which will enable the best European canal practice to be followed. Assuming a proper hull construction and model, it is entirely practicable to infer the barge canal may have in service vessels capable of carrying from 1,000 to 1,500 tons of cargo or even more. A barge 300 ft. long, 40 ft. beam, and drawing 10 ft. of water, with a reasonable design of hull and provided with moderate steam power, should be able to carry 2,500 tons or more of cargo. In considering the Canadian possibilities Mr. Fry says he does not hope to see New York the fall and spring harbor of Montreal as the result of the construction of the canal. Montreal, the commercial capital of Canada, lies 384 miles due north of New York. When the barge canal is completed vessels of 10 ft. draft will be able to navigate to Rouse's Point, within 50 miles by land of Montreal. Of the inland navigation between New York and Rouse's Point only 35 miles will be in land line or greatly restricted waterway, the remainder lying in the Hudson River and in Lake Champlain, with channels 200 ft. or more wide and 12 ft. deep, and for about 150 miles over 18 ft. deep.

He is a believer in the ultimate construction of the so-called Georgian Bay Canal, and it is therefore well for New Yorkers to look for the means by which, to the profit of Canada and themselves, such portions of the traffic to Montreal as would bear transhipment could go out via a canal to Lake Champlain, the Hudson, and the port of New York. The alleged dangers and difficulties of spring and fall navigation Mr. Fry considers too well known to need restating, but he is evidently inclined to exaggerate them, and the fact that much Canadian produce could be loaded in barges and steam propellers of fair tonnage for distribution is well worth remembering. It is a question of but a short time when the products heretofore obtained from the eastern forests of the U.S. must be replaced by the wood of Canada, and the abundant water powers along Lake Champlain and the northern frontier of the U.S. will encourage the establishment of new woodworking centres. What effect the construction of the Georgian Bay Canal would have on the commerce of Montreal, or what share a decent Champlain connection might bring to the United States, is a matter of conjecture. Even if the Georgian Bay Canal were not constructed, it is believed that by an expenditure of less than $14,000,000 it is possible for either the Canadian Government or private parties to make navigable a direct waterway between Montreal and Lake Champlain via St. John's and the Richelieu River, for vessels that would carry 2,000 tons or more. At relatively small cost the present waterway in Canada between the St. Lawrence and Lake Champlain could be improved.

In the light of Mr. Fry's paper the following description of what the Canadian Government has done for the development of navigation between Lake Champlain and the St. Lawrence River will be of interest.

The Richelieu and Lake Champlain system of navigation commences at Sorel, at the confluence of the St. Lawrence and Richelieu Rivers, 46 miles below Montreal, extends along the latter river, through the St. Ours lock, to the basin at Chambly, thence by the Chambly Canal to St. John's, and along the River Richelieu to Lake Champlain. The distance from Sorel to the International boundary line is 81 miles, divided as follows: Sorel to St. Ours lock, 14 miles; St. Ours lock to Chambly canal, 32 miles (inclusive of the lock ⅛ mile); Chambly canal, 12 miles; Chambly canal to International boundary, 23 miles. The St. Ours lock and dam is in the eastern channel of the river, the dimensions being: Lock, 200 ft. by 45 ft.; with a depth of 7 ft. on sill at low water; rise of lockage, 5 ft.; length of dam in eastern channel, 300 ft.; length of dam in western channel, 690 ft. Between St. Ours lock and Chambly Basin there is a navigable channel having a depth of 7 ft. The Chambly canal overcomes the rapids between Chambly and St. John's. The dimensions of the locks, etc., are: Guard lock 1 at St. John's, 122 ft. long; lift lock 2, 124 ft. long; lift locks 3, 4, 5 and 6, each 118 ft. long; lift locks 7, 8 and 9, combined, 125 ft. long; they have widths varying from 22½ ft. to 24 ft.; with a depth of 7 ft. of water on the sills; the total rise or lockage being 74 ft. The canal has a breadth of 36 ft. at the bottom and of 60 ft. at the surface of the water. During the season of navigation of 1906 the traffic carried on the Chambly canal was 498,939 tons, an increase of 51,870 over 1905; the figures for the season of 1907 are not yet available.

A company with the title of the Lake Champlain and St. Lawrence Ship Canal Co. was incorporated by an act passed by the Dominion Parliament in 1898, with power to construct a canal from the south shore of the St. Lawrence River in Chambly county to the Chambly canal, or to the Richelieu River, as might be most convenient, to carry on a general navigation business and for other purposes. The provisional directors named in the act are: Hon. A. A. Thibeaudeau, Hon. W. Owens, Hon. T. Berthiaume, R. Prefontaine, S. H. Ewing, A. J. Corriveau, H. A. A. Brault, R. Bickerdike, A. Haig-Sims, P. Galibert, C. Berger, T. T. Gauthier, W. G. Reid, Montreal; S. T. Willett, Chambly Canton, Que.; Hon. J. Girouard, M. Perrault, L. E. Morin, Longueuil, Que.; J. Ocain, A. MacDonald, St. John's, Que.; S. M. Weed, Plattsburg, N.Y.; C. F. Barger, J. W. Allison, New York City; C. H. Cummings, Mauch Chunk, Pa. The company obtained a renewal of its charter rights in 1902, when a number of changes were made in the provisional directorate. Efforts were made during that year to interest U.S. capital in the route, and some preliminary surveys were made. At the recent session of the Dominion Parliament an act was passed granting a further extension of two years to commence the work of construction and of five years to complete the canal.

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SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie canals in July:

Articles.			Canadian Canal	U.S. Canal	Total
Copper	Eastbound	Net tons	904	7,572	8,476
Grain	"	Bushels	2,100,720	1,847,357	3,948,077
Building stone	"	Net tons	....	577	577
Flour	"	Barrels	193,846	341,441	535,287
Iron ore	"	Net tons	1,003,183	3,369,709	4,372,892
Pig iron	"	"	....	3,256	3,256
Lumber	"	M. ft. B.M.	3,067	67,498	70 565
Wheat	"	Bushels	3,457,181	1,946,665	5,403,846
General merchandise	"	Net tons	6,467	9,593	16,060
Passengers	"	Number	4,427	3,717	8,144
Coal, hard	Westbound	Net tons	113,491	165,228	278,719
Coal, soft	"	"	459,988	1,368,869	1,828,857
Flour	"	Barrels	265	....	265
Grain	"	Bushels	....	....	....
Manufactured iron	"	Net tons	15,140	15,693	30,833
Iron ore	"	"	....	....	....
Salt	"	Barrels	10,482	51,581	62,063
General merchandise	"	Net tons	46,989	71,156	118,145
Passengers	"	Number	5,189	2,977	8,166
Vessel passages		Number	869	1,677	2,546
Registered tonnage		Net	1,497,473	3,640,895	5,138,368
Freight—Eastbound		Net tons	1,178,380	3,643,901	4,822,281
" Westbound		"	637,187	1,628,681	2,265,868
Total freight		"	1,815,567	5,272,582	7,088,149

A. B. Stanbury and W. R. Davis have been appointed Measuring Surveyors of Shipping for Toronto and Hamilton respectively.

P. E. Parent, District Engineer Marine Department, Quebec, left there Aug. 20, on the Government steamship Rouville, on a tour of inspection to Father Point, Bicquette and Saguenay.

The schooner Katherine V. Mills was launched at Granville Ferry, N.S., Aug. 19, and will be engaged in the West Indies trade. Her dimensions are: Length, 100 ft.; breadth, 30 ft.; depth of hold, 11 ft; 200 tons register.

Stranding of the S.S. Portsmouth.

Commander O. G. V. Spain, R. N., Dominion Wreck Commissioner, with Captains C. Koenig and J. Bain as assessors, held an inquiry at Quebec, recently, into the cause of the stranding of the s.s. Portsmouth near Cape Chatte, on July 12. The following judgment has been given: The s.s. Portsmouth was bound from South Wales to Quebec with a cargo of coal for His Majesty's Atlantic fleet at Quebec. She was properly found in all the Board of Trade requirements and everything went well on the voyage across the ocean until 3.25 p.m. on July 12, when the ship struck the well-known reef about 4 miles east of Cape Chatte. The master, Capt. Roberts, after being for some 24 hours on deck continuously, and the weather being fine and clear, and sea smooth, left the deck in charge of the first officer, J. L. Marten, with instructions to keep the course, which was west ¾ north, and not to approach closer than 1½ to 2 miles from the land. At 2.25 the first officer, being under a mistaken impression that he was too far from the land, altered the course to west, and continued on this course till the ship struck at the time above mentioned. The court is of the opinion that the casualty to the s.s. Portsmouth was caused by disobedience of the master's orders on the part of J. L. Marten, the first officer, in altering the course contrary to instructions and not informing the master before doing so. The first officer himself acknowledges that this was the cause and made an entry to that effect in the mate's official log after the accident. The court wishes to place on record the straightforward evidence given by the first officer, but cannot overlook his direct disobedience of orders, and therefore suspends the foreign sea-going Board of Trade certificate of first mate no. 034864, held by J. L. Marten, for a period of 12 months from July 12, 1908, the date of the casualty, but grants him a second mate's certificate during that period.

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C. Stanton and L. Bance have been appointed Assistant Deputy Minister, and Chief Clerk, respectively, of the Dominion Department of Marine.

The Governor-General in Council has approved an addition to the tariff of tolls charged at Government wharfs, providing that on small lots of general merchandise shipped to one consignee, 4c. a cwt. may be charged.

The Mexican and Foreign Products Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $18,000, and office at Montreal, to carry on a general business as manufacturers' agents, warehousemen, forwarders, brokers, etc., and to acquire and operate warehouses, elevators, wharves, and vessels of all kinds necessary for the business of the company.

Among the Express Companies.

J. A. Hill has been appointed Assistant Auditor, Canadian Northern Ex. Co., Winnipeg, Man.

The Dominion Ex. Co. is now operating over the Temiskaming and Northern Ontario Ry. between Englehart and Matheson, Ont.

The Canadian Ex. Co. has opened new offices at Leamington, Port Arthur, Ruthven, Ont.; Murray Bay, Que.; and Royalty Junction, P.E.I.

The American Ex. Co.'s service is now in force on the Duluth, Rainy Lake and Winnipeg Ry. extension to Fort Frances, Ont., and an office opened there.

G. W. Waistell, heretofore cashier Dominion Ex. Co., Nelson, B.C., has been appointed agent at Rossland, B.C., and is succeeded by J. A. Lanigan from the Calgary, Alta., staff.

E. Allen, heretofore Assistant Superintendent western, northern, and southern divisions Canadian Ex. Co., has been appointed Superintendent, with headquarters at Toronto.

W. S. Stout, President and General Manager Dominion Ex. Co., was elected on the Executive Committee of the Expressmen's Mutual Benefit Association, at the recent convention held at Boston, Mass.

The Dominion Ex. Co.'s service has been placed on the following C.P.R. extensions: Between Bala and Romford; Linwood and

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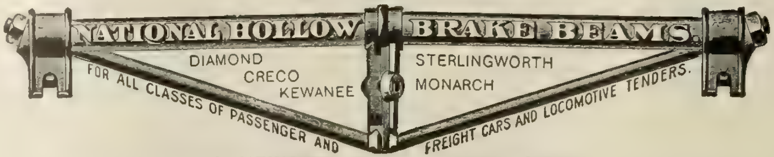
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W. A. Robinson, heretofore agent Canadian Ex. Co. at Brantford, Ont., has been appointed to Hamilton, Ont., succeeding J. H. Moore, resigned. A. H. Brown, heretofore at Mount Clement, Mich., has been appointed to the Brantford agency.

The appeal of the Reid Newfoundland Co against the judgment of the Newfoundland Supreme Court, which upheld the imposition of a tax on the company's express business, was dismissed with costs, recently, by the Judicial Committee of the Privy Council.

Telegraph and Cable Matters.

The Canadian Northern Telegraph Co. has now offices at Lamont, Alta., and Sifton, Man.

N. Rabbits, who has been in the employ of the Anglo-American Telegraph Co. from boyhood, died at Brigus, Nfld., July 29, aged 53.

J. Kent, Manager C.P.R. Telegraph Department, returned to Montreal, July 30, after having spent a short vacation in the west.

T. Ellis, an operator engaged with the Direct Cable Co., died suddenly in the street in Halifax, N.S., Aug. 3. Prior to coming to Halifax he was in the company's office in Ireland.

The M.C. Rd. is reconstructing its telegraph line between Windsor and Niagara Falls, Ont., the lease of which to the G.N.W. Telegraph Co. has been renewed for a further 30 years.

F. J. Mahon, until recently chief operator C.P.R. Telegraphs, Montreal, has been appointed Inspector of Telegraphs, and J. F. N. Caisse succeeds him as chief operator. They have been in the company's employ for 23 and 21 years respectively.

W. H. Allinson, senior train dispatcher, C.P.R., Toronto, is retiring under the pension rules, after 29 years' service with the company. He entered the service of the Credit Valley Ry. Co., now part of the C.P.R., in 1879, and for eleven years has been general chairman of the Order of Railroad Telegraphers on the C.P.R. system.

At the recent meetings of Railway Telegraph Superintendents in Montreal, a telegraph message, dated Nov. 22, 1848, sent from London, Ont., to St. Catharines, over the Toronto, Hamilton, Niagara and St. Catharines Line, was produced and read by W. Marshall, Superintendent of Telegraph Construction, C.P.R., Toronto.

The C.P.R. has opened telegraph offices at Burmis, Alta.; Smelter, B.C.; Warren, Man.; Barnesdale, Burwash, Byng Inlet, Dorking, Durham, Flesherton, Hanover, Muskoka, Naescootyong, Parry Sound, Peart, Pickerel, Point au Baril, Priceville, Rutter, Shawanagan, Still, Tralee, Ont.; Chelsea, Que.; and Asquith, Bender, Elstowe, Enfold, Lockwood, Maryfield, Sedley, Stockholm, Sutherland, Viscount, Wilcox, and Windhorst, Sask.

The following sums were voted at the recent session of the Dominion Parliament on account of the Government telegraph lines, in addition to the amounts previously reported:

Cape Breton lines extensions	$ 6,400
Quebec lines extensions	2,500
Edmonton-Athabasca line extension	10,000
Moose Jaw-Willow Branch line	3,350
Kamsack Indian Agency line	450
Qu'Appelle, Edmonton line	10,895
British Columbia lines	24,800
Lines in Yukon Territory	2,350
Additional amounts required for the operation and maintenance of various lines	52,600
Telegraph services generally, additional amounts	3,000

The fiftieth anniversary of the laying of the Atlantic cable was celebrated Aug. 16. This, of course, refers to the first cable over which a message was transmitted, but which broke after being in operation a few weeks. Some seven years later, the civil war intervening, the project was again taken up by the late Lord Kelvin, then William Thomson, and satisfactorily completed, since when there has been practically no interruption between Great Britain and America. Fifty years ago there was one cable and one company, with the tariff at £1 a word, and to-day there are 15 cables, 6 companies, and a tariff of 1s. a word, while it is anticipated that in the near future a 6d. tariff will be put in force.

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Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Aerated Waters
E. L. Drewry.....Winnipeg.

Air Brakes and Fittings
Canada Foundry Co.....Toronto.
Canadian Westinghouse Co.....Hamilton, Ont.

Ales
E. L. Drewry.....Winnipeg.

Alloys
Goldschmidt Thermit Co.....Toronto.

Angle Bars
Hamilton Steel & Iron Co.....Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co.....Racine, Wis.

Automobiles
Polson Iron Works, Ltd.....Toronto.

Axes
James Smart Mfg. Co.....Brockville, Ont.

Axe Steel
Montreal Steel Works.....Montreal.

Axles
James Hutton & Co.....Montreal.
Jas. W. Pyke & Co.....Montreal.
Rhodes, Curry & Co.....Amherst, N.S.

Badges
R. Woodman Mfg. & Supply Co...Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co...Boston, Mass.

Beacons
International Marine Signal Co.....Ottawa.

Bearings, Side
Chicago Railway Equipment Co.....Chicago, Ill.

Blankets and Bedding
The Hudson's Bay Co.....

Blasting Powder
Standard Explosives Limited.....Montreal.

Boilers
Babcock & Wilcox (Ltd.).....Montreal.
Canada Foundry Co.....Toronto.
Jno.McDougall,Caledonian IronWorks Co.Montreal
Polson Iron Works.....Toronto.

Boilers, Portable
Canada Foundry Co.....Toronto.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.).....Montreal.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.).....Montreal.

Boilers, Water Tube
Babcock & Wilcox (Ltd.).....Montreal.
Jno.McDougall,Caledonian IronWorks Co.Montreal

Boilers, Tubes
Jas. W. Pyke & Co.....Montreal.

Bolsters
Dominion Car and Foundry Co.....Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co.....Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co.....Toronto.

Bolts, Track
Toronto Bolt and Forging Co.....Toronto.

Box Car Loaders
Mussens Limited.....Montreal.

Brake Beams
Chicago Railway Equipment Co.....Chicago, Ill.
Dominion Car and Foundry Co.....Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.....Montreal.
N. J. Holden Co., Ltd.....Montreal.
Railway Materials Co.....New York City.

Brass and Copper Cloth
The B. Greening Co.....Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited.....Toronto.

Bridges
Canada Foundry Co.....Toronto.
Canadian Bridge Co.....Walkerville, Ont.
Dominion Bridge Co.....Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd.....Montreal.

Bumping Posts
McCord & Co.....Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co..New York.

Buoys
International Marine Signal Co.....Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co.....Montreal.

Car Castings
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.....Montreal.

Car Cleaner
Modoc Soap Co.....Philadelphia, Pa.

Car Closets
Duner Co.....Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd.....Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co..New York.
Canadian Gold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Jacks
Canadian Fairbanks Co., Ltd.....Montreal.
F. H. Hopkins & Co.....Montreal.
Mussens Limited.....Montreal.

Car Lighting
Bliss Electric Car Lighting Co...Milwaukee, Wis.
Canadian Cold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
Canadian Fairbanks Co., Ltd.....Montreal.
F. H. Hopkins & Co.....Montreal.
Mussens Limited.....Montreal.
R. Woodman Mfg. & Supply Co...Boston, Mass.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd.....Montreal.
F. H. Hopkins & Co.....Montreal.

Car Seals
R. Woodman Mfg. & Supply Co....Boston, Mass.

Car Wash Brushes
Wolfe Brush Co.....Pittsburg, Pa.

Cars
American Car and Equipment Co....Chicago, Ill.
Canada Car Co. (Ltd.).....Montreal.
Crossen Car Mfg. Co.....Cobourg, Ont.
Dominion Car and Foundry Co.....Montreal.
J. T. Gardner.....Chicago, Ill.
Hart-Otis Car Co. (Ltd.).....Montreal.
Hotchkiss, Blue & Co.....Chicago, Ill.
King-Lawson Car Co.....New York.
Preston Car and Coach Co., Ltd...Preston, Ont.
Rhodes, Curry & Co.....Amherst, N.S.

Cars, Mine
Canadian Fairbanks Co., Ltd.....Montreal.

Car Windows
O. M. Edwards.....Syracuse, N.Y.

Castings
Crossen Car Mfg. Co.....Cobourg, Ont.
Standard Steel Works Co.....Philadelphia, Pa.

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Canada Car Co., Ltd. . . . . Montreal.
Canadian Iron and Foundry Co. . . . . Montreal.
Kerr Engine Co. . . . . Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co—Mahwah, N.J.

Castings, Malleable
Taylor & Arnold . . . . Montreal.

Castings, Steel
Canadian Iron and Foundry Co. . . . . Montreal.
Montreal Steel Works . . . . Montreal.
Rhodes, Curry & Co. . . . . Amherst, N.S.

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Cast Steel Track Tools
American Brake Shoe & F'dry Co. . Mahwah, N.J.

Cast Steel Wrenches
American Brake Shoe & F'dry Co. . Mahwah, N.J.

Cement Machinery
Jas. W. Pyke & Co. . . . . Montreal.

Chains
B. J. Coghlin & Co. . . . . Montreal.

Charcoal Iron Staybolt Bars
Falls Hollow Staybolt Co. . Cuyahoga Falls, Ohio.

Clevis Nuts
Cleveland City Forge & Iron Co. . . . Cleveland, O.

Coal Haulage Ropes
The B. Greening Co. . . . . Hamilton, Ont.

Concrete Mixers and Rock Crushers
Canadian Fairbanks Co., Ltd. . . . . Montreal.
F. H. Hopkins & Co. . . . . Montreal.
Mussens Limited . . . . Montreal.
Toronto Pressed Steel Co. . . . . Toronto.

Contractors' Plant
American Car and Equipment Co. . . . Chicago, Ill.
American Hoist and Derrick Co. . . St. Paul, Minn.
M. Beatty & Sons . . . . Welland, Ont.
Canadian Fairbanks Co., Ltd. . . . . Montreal.
J. T. Gardner . . . . Chicago, Ill.
F. H. Hopkins & Co. . . . . Montreal.
The W. H. Kelson Co. . . . . Montreal.
Mussens Limited . . . . Montreal.
Toronto Pressed Steel Co. . . . . Toronto.

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F. H. Hopkins & Co. . . . . Montreal.
Rice Lewis & Son . . . . Toronto.
Toronto Pressed Steel Co. . . . . Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.) . . . . Montreal.

Copying Presses
James Smart Mfg. Co. . . . . Brockville, Ont.

Corrugated Furnaces
Continental Iron Works . . . . Brooklyn, N.Y.

Counter Dusters
Wolfe Brush Co. . . . . Pitttburg, Pa.

Couplers, Car and Locomotive
Acme Railway Equipment Co. . Philadelphia, Pa.
Dominion Car and Foundry Co. . . . . Montreal.
Latrobe Steel & Coupler Co. . . . Philadelphia, Pa.
McConway & Torley Co. . . . . Pittsburg, Pa.
National Malleable Castings Co. . Cleveland, Ohio.
Taylor & Arnold . . . . Montreal.
Washburn Steel Castings & Coupler Co.,
. . . . Minneapolis, Minn.

Cranes, Locomotive
American Hoist and Derrick Co. . . . St. Paul, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co. . . . . Toronto.

Cross Arm Braces
Canadian General Electric Co. . . . . Toronto.
Toronto Bolt and Forging Co. . . . . Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co. . . . Toronto.

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B. J. Coghlin & Co. . . . . Montreal.
Toronto Bolt and Forging Co. . . . . Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co. Hamilton.

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Derailing Devices
Hayes Track Appliance Co. . . . . Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co. . . . . Montreal.
The B. Greening Co. . . . . Hamilton, Ont.

Derricks
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M. Beatty & Sons . . . . Welland, Ont.
Miller Bros. & Toms . . . . Montreal.
Mussens Limited . . . . Montreal.

Dies
Butterfield & Co. . . . . Rock Island, Que.

Diving Outfits
John Date . . . . Montreal.
Mussens Limited . . . . Montreal.

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O. M. Edwards . . . . Syracuse, N.Y.

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Cardwell Mfg. Co. . . . . Chicago, Ill.
Farlow Draft Gear Co. . . . . Baltimore, Md.
McCord & Co. . . . . Chicago, Ill.
Standard Coupler Co. . . . . New York City.

Drawing Materials
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Dredges
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Drills
W. Abbott . . . . Montreal.

Dry Goods
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F. H. Hopkins & Co. . . . . Montreal.
King-Lawson Car Co. . . . . New York.
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Canada Foundry Co. . . . . Toronto.
Canadian Fairbanks Co., Ltd. . . . . Montreal.
Dominion Bridge Co. . . . . Montreal.
Mussens Limited . . . . Montreal.

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American Brake Shoe & F'dry Co. . Mahwah, N.J.

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Ontario Wind Engine and Pump Co. . . . . Toronto.

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M. Beatty & Sons . . . . Welland, Ont.
Canadian Fairbanks Co., Ltd. . . . . Montreal.

Engines, Stationary and Marine
Polson Iron Works . . . . Toronto.

Explosives
Standard Explosives Limited . . . . Montreal.

Express Office Signs
Acton Burrows Limited . . . . Toronto.

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McGregor Banwell Fence Co. . . . Walkerville, Ont.
Owen Sound Wire Fence Co. . Owen Sound, Ont.

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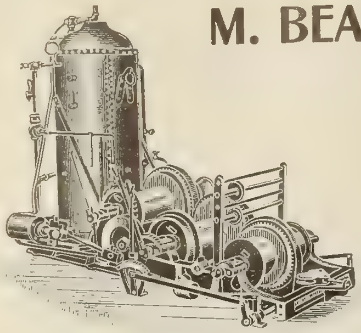

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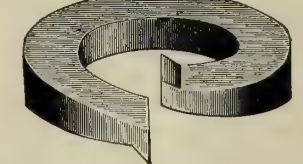

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Miller Bros. & Toms ...... Montreal.

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Painters' Wall Brushes
Wolfe Brush Co. ...... Pittsburg, Pa.

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Toronto Pressed Steel Co. ...... Toronto.

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Mussens Limited ...... Montreal.

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Polson Iron Works ...... Toronto.

Steamship Signs
Acton Burrows Limited ...... Toronto.

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Wm. Jessop & Sons ...... Sheffield, Eng.

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Canadian Bridge Co. ...... Walkerville, Ont.
Dominion Bridge Co. ...... Montreal.

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Jas. W. Pyke & Co. . . . . Montreal.

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Jas. W. Pyke & Co. . . . . Montreal.

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Submarine Signal Co. . . . . Boston, Mass.

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The N. L. Piper Railway Supply Co. . . . . Toronto.

Switch Ropes
The B. Greening Co. . . . . Hamilton, Ont.
F. H. Hopkins & Co. . . . . Montreal.

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Hayes Track Appliance Co. . . . . Geneva, N. Y.

Switch Targets
Acton Burrows Limited . . . . . Toronto.

Tanks and Tank Fixtures
Canadian Fairbanks Co. . . . . Montreal.
Canada Foundry Co. . . . . Toronto.
Jno. McDougall, Caledonian Iron Works Co. Montreal
Ontario Wind Engine and Pump Co. . . . . Toronto.

Taps
Butterfield & Co. . . . . Rock Island, Que.

Telegraph and Telephone Office Signs
Acton Burrows Limited . . . . . Toronto.

Thermit
Goldschmidt Thermit Co. . . . . Toronto.

Ticket Cases
Canadian Office and School Furniture Co. . Preston.

Ticket Punches
R. Woodman Mfg. and Supply Co. . Boston, Mass.

Tie Plates
B. J. Coghlin & Co. . . . . Montreal.

Ties
Fullerton Lum. & Shin. Co. (Ltd.) . Vancouver, B.C.

Timber
Fullerton Lum. & Shin. Co (Ltd.) . Vancouver, B C

Tires
Standard Steel Works Co. . . . . Philadelphia, Pa.

Tools
James Smart Mfg. Co. . . . . Brockville, Ont.

Track Jacks
Canadian Fairbanks Co. . . . . Montreal.
H. and E. Lifting Jack Co. . . . . Waterville, Que.
F. H. Hopkins & Co. . . . . Montreal.
Montreal Steel Works . . . . . Montreal.
Mussens Limited . . . . . Montreal.
A. O. Norton . . . . . Coaticook, Que.

Tracklaying Lorries
Crossen Car Mfg. Co. . . . . Cobourg, Ont.
F. H. Hopkins & Co. . . . . Montreal.

Tracklaying Machinery
F. H. Hopkins & Co. . . . . Montreal.

Track Tools
Canadian Fairbanks Co., Ltd. . . . . Montreal.
B. J. Coghlin & Co. . . . . Montreal.
F. H. Hopkins & Co. . . . . Montreal.
Montreal Steel Works . . . . . Montreal.
Mussens Limited . . . . . Montreal.

Tramway Equipment
J. J. Gartshore . . . . . Toronto.

Trap Doors
O. M. Edwards . . . . . Syracuse, N.Y.

Trucks
James Smart Mfg. Co. . . . . Brockville Ont.

Trucks (Electric Car)
Burnham, Williams & Co. . . . . Philadelphia, Pa.
Montreal Steel Works . . . . . Montreal.

Trucks (Railroad and Warehouse)
Toronto Pressed Steel Co. . . . . Toronto.

Turnbuckles
Cleveland City Forge and Iron Co. . Cleveland, O.
Montreal Steel Works . . . . . Montreal.

Turntables
Canada Foundry Co. . . . . Toronto.
Canadian Bridge Co. . . . . Walkerville, Ont.
Dominion Bridge Co. . . . . Montreal.

Turntable Motors
Taylor & Arnold . . . . . Montreal.

Uniform Buttons
R. Woodman Mfg. and Supply Co. . Boston, Mass.

Valves, Brass Gate
Kerr Engine Co. . . . . Walkerville, Ont.

Valves, Brass Globe
Kerr Engine Co. . . . . Walkerville, Ont.

Valves, Iron and Brass
Canada Foundry Co. . . . . Toronto.
Canadian Fairbanks Co. . . . . Montreal.

Valves, Iron Gate
Kerr Engine Co. . . . . Walkerville, Ont.

Varnish Brushes
Wolfe Brush Co. . . . . Pittsburg, Pa.

Varnishes
Canadian Oil Co. . . . . Toronto.
McCaskill, Dougall & Co. . . . . Montreal.

Vessels
Polson Iron Works . . . . . Toronto.

Waste
B. J. Coghlin & Co. . . . . Montreal.
N. L. Piper Railway Supply Co. . . . . Toronto.

Water Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co. . Hamilton.

Water Softeners
Babcock & Wilcox (Ltd.) . . . . . Montreal.

Weather Strips
O. M. Edwards . . . . . Syracuse, N.Y.

Welding
Goldschmidt Thermit Co. . . . . Toronto.

Wheelbarrows
F. H. Hopkins & Co. . . . . Montreal.
Toronto Pressed Steel Co. . . . . Toronto.

Wheels, Car
Canada Car Co., Limited . . . . . Montreal.
Canadian Iron and Foundry Co. . . . . Montreal.
Jas. W. Pyke & Co. . . . . Montreal.
Rhodes, Curry & Co. . . . . Amherst, N.S.
Standard Steel Works Co. . . . . Philadelphia, Pa.

Wheels, Locomotive
Canadian Iron and Foundry Co. . . . . Montreal.

Wheels, rolled, solid forged
Standard Steel Works Co. . . . . Philadelphia, Pa.

Wheels, steel tired
Standard Steel Works Co. . . . . Philadelphia, Pa.

White Wash Brushes
Wolfe Brush Co. . . . . Pittsburg, Pa.

Windmills
Ontario Wind Engine and Pump Co. . . . . Toronto.

Window Fixtures
O. M. Edwards . . . . . Syracuse, N.Y.

Wire and Wire Rope
Dominion Wire Rope Co. . . . . Montreal.
The B. Greening Co. . . . . Hamilton, Ont.
Mussens Limited . . . . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire Cloth
The B. Greening Co. . . . . Hamilton, Ont.

Wire, Copper
E. F. Phillips Electrical Works, Ltd. . . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire, Electric
Canadian General Electric Co. . . . . Toronto.
E. F. Phillips Electrical Works, Ltd. . . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire, Insulated Copper
Canadian General Electric Co. . . . . Toronto.
E. F. Phillips Electrical Works, Ltd. . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire Rope Clips
American Hoist and Derrick Co. . . . St. Paul, Minn.

Wire, Telegraph and Telephone
E. F. Phillips Electrical Works, Ltd. . . . Montreal.
The Wire and Cable Co. . . . . Montreal.

Wire, Transmission and Trolley
The Wire and Cable Co. . . . . Montreal.

Wrecking Cranes
Mussens Limited . . . . . Montreal.

Yachts
Polson Iron Works . . . . . Toronto.

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See Purchasing Agents' Guide on page 761

See Alphabetical Index to Advertisements on page 727.

THE
Railway and Marine World
With which are incorporated The Western World and
The Railway and Shipping World, Established 1890

Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' interests

Old Series, No. 210.
New Series, No. 128.
TORONTO, CANADA, OCTOBER, 1908.
For Subscription Rates, See page 727.
Entered as second-class matter, March 5, 1908, at the Post Office at Buffalo, N.Y., under the act of Congress of March 3, 1879.

Regulating the Common Carrier.

By William Whyte, Second Vice-President C.P.R.

It is a self-evident truth that the development and prosperity of any new country depends upon its transportation facilities. Production without transportation is often impossible, and always unprofitable; consequently the fertile Canadian prairies lay untilled, and the lead, the copper, the coal of the West remained undisturbed where a generous Providence placed them. The forests were choked, and the fish multiplied in the myriad of lakes and rivers; and the great silence was broken only by shouts of sportsmen, the snapping of steel traps set by the Hudson's Bay traders and the creaking of Red River carts. The Canadian West was a sealed empire waiting the touch of steel rails to open its doors to the world. One would naturally suppose, therefore, that the Canadian Government, fearful of discouraging railroad construction at a time when it was sorely needed, would have moved slowly in the matter of enacting a railway regulation measure which, in the United States, at least, would have been considered drastic. But the Government saw clearly that, while additional transportation facilities were of vital importance, yet, at the same time, efficient railway regulation was an absolute necessity to the development of the West, and, instead of resorting to dilatory tactics, it met the situation squarely, adopted the Railway Act; and, when the bill had gone into effect, the wisdom of the course which it had taken at once became apparent to all. Although it is not generally known, it is, nevertheless, an established fact that no country in the world has so great a mileage per capita as Canada now has. Then, add to this the fact that contracts have been let for hundreds of miles of additional railway, consisting in part of feeders which will suck up and bring to the main lines the crops from the newly developed wheat regions—and you will understand that Government regulation is not necessarily a fatal drag on a nation's railway prosperity.

Canadian railways are regulated by a board of three Commissioners, who are appointed for life. The chairman of the Board receives an annual salary of $10,000, and associate members $8,000. This board is authorized to employ the services of experienced railway men as experts in the different branches of railway work. The Commission is endowed with powers that would make a citizen of the United States, accustomed to the weak and ineffectual efforts of the Interstate Commerce Commission, gasp with astonishment.

The publicity recently accorded the affairs of several large railways in the United States, as a result of the proceedings of the Interstate Commerce Commission, has been the means of arousing considerable interest in all parts of Canada, and, as a natural consequence, Canadians, ever on the outlook for improvements in all things, have compared their Dominion Railway Act and the powers of their Railway Commission with the Interstate Commerce Commission. The result of the comparison is interesting indeed.

C. B. FOSTER,
Assistant General Passenger Agent, Canadian Pacific Railway
Pacific Division.

Whenever railway regulation, considered necessary for the public good in Canada, is adopted, there is no cry of "confiscation" on the part of the railway companies; no much-mooted abstract questions as to the constitutionality of the Act are raised, and no protracted and expensive legislation ensues. The authority of the Board's members is plenary within its jurisdiction, and its decisions and orders may be made rules of any Superior Court. There is no appeal from their decision, unless the Board itself grants an appeal, except on questions of jurisdiction or to the Governor in Council. It is to be noted in this connection that when the statute authorizing this Board of Commissioners and defining their immense powers in railway regulation was enacted, it was with the approval and co-operation of most of the Canadian roads. This statement will be pregnant with interest to a citizen of the States who is familiar with the railway situation in his own country. It is, nevertheless, true in every particular. The Canadian's characteristic respect for the law is primarily responsible for this most satisfactory result. All classes seem to agree in the sentiment: "It is the law; it must be obeyed." The railways realized at once that such action on the part of the Dominion Government could not fail to operate to the mutual benefit of the Canadian people and, in the end, to their own benefit.

In one step Canada has accomplished what the United States has not been able to do in years of effort. The powers of the Railway Commission under the Railway Act are infinitely greater and more clearly defined than are those of the Interstate Commerce Commission under the Interstate Commerce Act, and, in comparison, the latter seems ridiculously weak and ineffectual. The power of the Railway Commission within its jurisdiction over the railways in Canada is absolute, and its duties and powers are set forth in the Railway Act. Such is not the case with the Interstate Commerce Commission. It might be well to mention a few of the more important powers extended to the Railway Commission which the Interstate Commission does not seem to possess.

It possesses jurisdiction over telegraph or telephone lines operated by railway companies, and all matters pertaining thereto. It can order the abolition of grade crossings where it considers them too dangerous to the community to be permitted, and can order the railways to construct subways or overhead crossings, or the installation of safety appliances at level crossings. It has the power to regulate the running and operation of trains, and can order changes in schedules or operation of additional trains to give better service for the accommodation of business. Railway companies must report to the Board all cases of fatal or serious injury. All agreements for the sale, lease, or amalgamation of railways must be approved by the Board. The Board may order the allotment or distribution of cars where there may be question of discrimination. Railway companies must submit to the Board plans of all branch lines, spurs, sidings, or railways of any description whatever, and the approval of the Board must be secured before the work can be commenced. This applies, also, to all works, bridges, etc., which the railways may desire to construct. The Board may order the construction of bridges over navigable waters, and the regulations respecting the construction of such bridges are included in the Railway Act. The Board may exercise jurisdiction

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Sole manufacturers of the celebrated GALENA COACH, ENGINE and CAR OILS, and SIBLEY'S PERFECTION VALVE and SIGNAL OILS.

GUARANTEE COST per thousand miles for from one to five years, when conditions warrant it.

Maintain EXPERT DEPARTMENT, which is an organization of skilled railway mechanics of wide and varied experience. Services of Experts furnished free of charge to patrons interested in the economical use of oils.

STREET RAILWAY LUBRICATION
A SPECIALTY.

GALENA RAILWAY SAFETY OIL

Made especially for use in Headlights, Cab, Classification and Tail-lights, and for Switch and Semaphore Lamps. Burns equally well with the long time as with the one day burner, with or without chimney, as the burner requires.

Is pure water white in color; high fire test; low cold test, and splendid gravity.

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CHARLES MILLER,
PRESIDENT.

over claims against railway companies; at the same time, it protects the railway companies from unjust claims. The Board may determine what lands the railway companies may take without owner's consent for right-of-way, etc., and its authority extends to expropriation proceedings of every description. No railway may cross or join another railway without the consent of the Board. The Railway Act defines the duties and powers of directors of railways. It can fix either maximum or absolute rates. All freight tariffs have to be filed with, and receive the approval of the Commission, which has the power to order changes in them. No toll can be charged which unjustly discriminates between different localities. No greater toll can be charged for a shorter than for a longer haul unless, in the judgment of the Commission, special conditions make it necessary. Freight tariffs are governed by a classification which must receive the approval of the Board. This insures uniformity of classification.

The effect of this beneficent rate regulation on the commercial development of Canada cannot be over-estimated. Consider for one moment what this protection means: 1.—Equal rates for all. A guarantee that one section of the country will not be exploited to the detriment of another region equally endowed with natural resources. 2.—No secret rebates. An exemplification of the "live and let live" policy. The small producer is zealously protected, and is afforded an equal chance on the same basis with a wealthy corporation. 3.—Government regulation of train schedules. An absolute assurance to the shipper that he can fulfil his contracts. In short, it may be said that the Board of Railway Commissioners has absolute control over all matters pertaining to the construction, operation and maintenance of railways, and, in comparison, the powers of the Interstate Commerce Commission seem dwarfed almost to insignificance. It may be said, also, that not only does the Dominion Railway Act, which gave to the Board of Railway Commissioners its life, protect the public, but it also protects the railway companies. For instance, a town where one railway is already located may desire the entrance into the town of another railway, and may wish to grant a location to the entering road which might prove injurious to the first road. In such a case, the first road may appeal to the Commission against this injustice, and the Board has the power to compel the second road to enter the town by another route.

Previous to 1881, the country lying west of Winnipeg had never heard the whistle of a locomotive. Now, there are over 5,000 miles of track in operation through a region which in 1906 produced nearly 100,000,000 bushels of wheat, and which shipped—for export alone—some 80,000 head of cattle.

The Canadian Pacific Ry. was, of course, the real pioneer, throwing open to the world its last Great West, carrying on its work of construction and development in the face of obstacles which, in any other country, would have spelled failure for any enterprise; but this railway has won an empire from a wilderness and has turned defeat into a tremendous success. To-day, in a desperate effort to meet the requirements of the region through which it runs, this railway is building eight new branches. Its orders for rolling stock equipment amounted last year to $11,808,751, and it spent in the West alone in the neighborhood of $20,000,000 in improvements and new works. The railway is indeed moving fast, but the incoming settlers are moving faster.

In all that the road has done for upbuilding Western Canada, it has had in mind the permanent prosperity of the settler. The plan has been to create every possible element of success in the way of transportation auxiliaries to successful cultivation of the soil, harvesting of the crop and converting it into cash. From colonization of the empty prairies to cultivation of profitable crops and converting them into cash, the policy of the road has been to co-operate with the incoming population to the best of its ability. It has gone far beyond the usual sphere of a transportation company.

Every possible co-operation is given to enable the settler to get the most possible out of the soil. The Dominion Government, the Provincial Governments, and the railways each endeavor to bring to the cultivator of the soil definite information of seeds, methods of cultivation, care of crops, etc., etc. Seeds are sought which are best for the soil and climate. These are brought in and given to the farmer almost without financial consideration. He is shown how to plant the seed and how to care for the ground. Special trains have been sent through the country with seeds and with instructions. Nothing is left to chance. Organized effort eliminates risk as nearly as the enormous resources at the disposal of the Government and of the railway can accomplish it. The aim is to make profitable crops a certainty in Western Canada. How enormous is the crop which the Canadian railways are working like beavers to handle may be reailzed when it is said that more than once last year the daily receipts of wheat at Winnipeg exceeded the combined daily receipts at Duluth, Minneapolis and Chicago. Next year the acreage under crop will be greatly increased, and so the total yield. Each year the golden stream of wheat flows wider and swifter and deeper down to the lakes, and, by the time the railways now under construction are completed, there will be need of more; for, with all of this wonderful progress, the development of the Canadian West has just begun. Is it any wonder, then, that thousands of men are being employed, and millions of money being expended in the construction of new lines which will be needed to assist in the movement of the crop of 1908?

With the tremendous undeveloped natural resources of Canada and the blessings incident to railway regulations such as these, there can be found no better field for capital seeking investment. Perhaps the fairest indication of hearty co-operation with the Government by the railways, and likewise of a firm belief in Canada's present and future prosperity, is the tremendous amount of railway construction going on to-day.

The foregoing article, which was published in Canada West, and copyrighted, is reproduced by the publisher's permission. It should be noted that since the article was written the Board of Railway Commissioners has been increased in membership from three to six.

Report on Car Efficiency.—The committee on car efficiency of the American Railway Association has issued its report on car surpluses and shortages to Sept. 2. The total of surplus cars for the date of the report is 222,632, a decrease of 30,371 since the previous report. Of this decrease 21,723 are box cars, 7,253 coal and gondola cars. Shop reports indicate a decrease of 7,662 in the number of bad order cars. The figures for group 11, which covers Canadian lines, show four lines reporting, with the following surpluses: 5,846 box cars, 282 flat cars, 134 coal, gondola and hopper cars, and 2,412 other cars, a total of 8,674 cars against a surplus of 8,627 cars on Aug. 19.

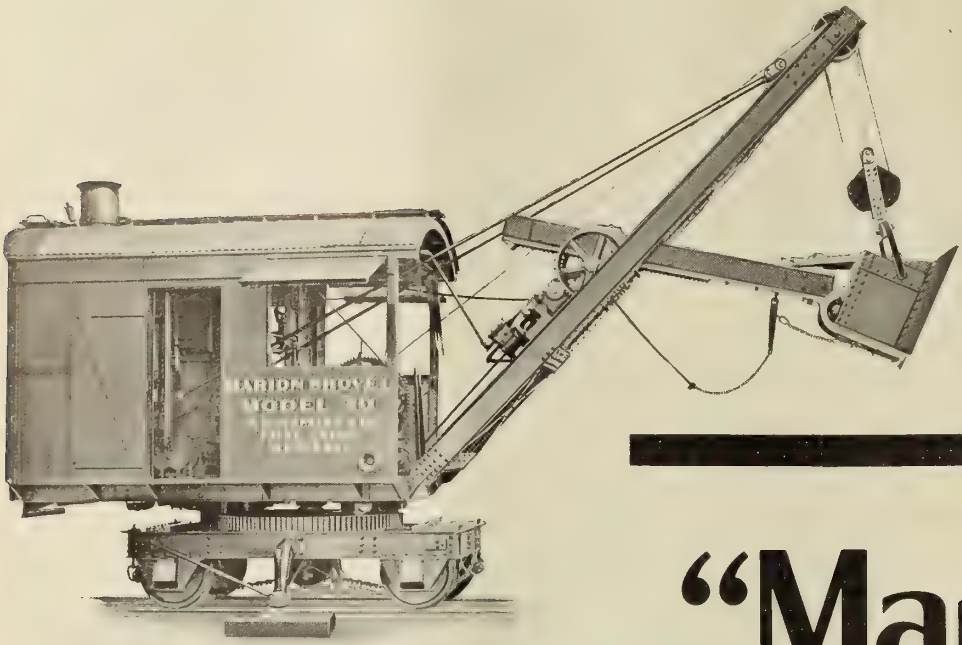
The Temiskaming and Northern Ontario Ry. Commission is reported to be about to establish a department to deal with the lands adjacent to its railway.

Car Efficiency Report.

The Committee on Car Efficiency of the American Railway Association has issued its report no. 30, covering car balance and performance for April, 1908. The adjusted average for the month is 25 miles per car per day, against 24.8 miles per car per day in April, 1907. The car balance figures furnish a striking example of how the car situation is affected by a reduction in the demand for cars. In April, 1907, with a shortage of approximately 100,000 cars, there were but 1,014,539 cars on the tracks of their owners, this number comprising 54% of the total number owned by reporting roads. In April of the current year, with a surplus of 365,627 cars, there were 1,620,203 cars at home, or 78% of the total owned. In April, 1907, there were six groups reporting as holding a total of 96,975 cars in excess of their ownership, while in April of the current year there were but two groups holding an excess of cars, the total of such excess being 13,764 cars. A further result of the decreased traffic was an increase in the number of bad order cars from 5.14% in April, 1907, to 9.93% in April, 1908. The total of such cars was 214,537, an increase of 103,487 cars over April, 1907. Loaded car mileage was 66.5% in April of the current year, against 70.6% in April, 1907. Compared with Mar., 1908, the April performance was unsatisfactory, the car mileage, tonnage and earnings falling off. The actual miles per car per day averaged 19.6, the lowest of which the committee has any record. The elimination of the surplus available and excess bad order cars, however, gives an average of 25 miles per day, which, while slightly lower than the adjusted average for Mar., compares favorably with actual averages during periods when cars were in demand. Applying the same adjustment to the earnings, an average of $2.38 per day for each car actually in use is shown. Although there was an increase in the number of cars on home lines, indicating a resumption of the return of foreign cars temporarily checked in Mar., this change in balance was not accompanied by an increase in the percentage of empty mileage, the proportion being unchanged from Feb. and Mar. figures. The tons per loaded car, which had steadily fallen off from Jan., shows a further decrease, the loading for April averaging 20 tons per car.

The statistics are based on reports submitted by 154 railways, having a total of 219,990 miles of railway. For classification purposes, these lines are divided into 11 groups, Canadian lines forming group 11. In this group there are four railways having 16,463 miles of railway in operation. The tables show that the four railways reporting are the C.P.R., G.T.R., Intercolonial and Toronto, Hamilton and Buffalo, and that no reports had been received from the Algoma Central and Hudson Bay Ry., Canadian Northern Ry., Quebec Central Ry., and Temiskaming and Northern Ontario Ry. The statistics gathered by the committee show the following totals for this group:

Revenue freight cars owned, 96,501; average number of system cars on line, 76,923; average foreign railway cars on line, 15,636; private cars on line, 3,751; total cars on line, 96,310; per cent. of cars in shops, 6.36; number of freight engines owned, 2,076; average cars on line per freight engine owned, 46; total freight car mileage, 69,431,487; average miles per car per day, 24.2; per cent. loaded car mileage, 71.7; ton miles of freight (including company freight), 916,828,386; average ton miles—per car mile, 13.1; per loaded car mile, 18.3; per car per day, 317; gross earnings, $5,895,109; average daily earnings—per car owned, $2.04; per car on line, $2.12; all cars, $2.04.



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Revolving Steam Shovels

Built along the same lines in point of material and workmanship as the Marion large size shovels. These Revolving Shovels are built in two sizes, viz., $\frac{3}{4}$ and $1\frac{1}{4}$ cubic yard dippers, and will stand up under the hardest work. The body of shovel revolves around a pivotal journal and is carried by five broad face conical steel rollers.

For a small, handy, quick acting, powerful steam shovel, there is nothing to approach either our Model 30 or Model 35.

CAN WE NOT SEND YOU COMPLETE SPECIFICATION AND BLUEPRINT?

Marion Standard Steam Shovels

All Capacities

Immediate Shipment

CANADIAN SALES AGENTS

F. H. Hopkins & Co

SUCCESSORS TO LATE JAMES COOPER

Montreal

C.P.R. ANNUAL REPORT.

Following is the 27th annual report addressed to the shareholders over the signature of the President, Sir Thos. G. Shaughnessy.

The accounts of the company for the year ended June 30, 1908, show the following results:

Gross earnings		$71,384,173 72
Working expenses		49,591,807 70
Net earnings		$21,792,366 02
Net earnings of steamships in excess of amount included in monthly reports		1,112,759 24
Interest on deposits and loans	$484,560 64	
Interest from Minneapolis, St. Paul & Sault Ste. Marie Ry. on bonds held by the Co.	159,720 00	
Interest from Mineral Range Railroad Co. on bonds held by the Co.	50,160 00	
Interest from Montreal & Atlantic Ry. and on other bonds held by the Co.	58,962 89	
Dividend on St. John Bridge & Ry. Extension Co. stock	50,000 00	
Dividends on Minneapolis, St. Paul & Sault Ste. Marie Ry. preferred and ordinary stocks held by the Co	738,470 50	
		1,541,874 03
		$24,446,999 29
Deduct fixed charges		8,770,076 71
Surplus		$15,676,922 58
Deduct amount transferred to steamship replacement acc't	$800,000 00	
Contribution to pension fund	80,000 00	
		880,000 00
		$14,796,922 58
From this there has been charged a ½-yearly dividend on preference stock of 2%, paid April 1, 1908	$ 940,340 45	
And a ½-yearly dividend on ordinary stock of 3%, paid April 1, 1908	3,650,400 00	
		4,590,740 45
		$10,206,182 13
From this there has been declared a second ½-yearly dividend on preference stock of 2%, payable Oct. 1, 1908	$976,066 65	
And a second ½-yearly dividend on ordinary stock of 3%, payable Oct 1, 1908	3,650,400 00	
		4,626,466 65
Leaving net surplus for the year		$ 5,579,715 48

In addition to the above dividends on ordinary stock, 1% was declared from interest on land funds.

The working expenses for the year amounted to 69.47% of the gross earnings, and the net earnings to 30.53%, as compared with 64.96 and 35.04% respectively in 1907.

Four per cent. consolidated debenture stock to the amount of £1,975,000 was created and sold, and of the proceeds £1,321,594 were applied towards the construction of branch lines in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia; £175,152 towards the completion of two new lake steamers; and the balance, £478,254, was used for acquiring the bonds of other railway companies, whose lines constitute a portion of your system, the interest on which had, with your authority, been guaranteed by the company. Preference stock to the amount of £1,000,000 was created and sold for the purpose of meeting expenditures you had sanctioned. Your guarantee of interest was endorsed on 4% consolidated mortgage bonds of the Minneapolis, St. Paul and Sault Ste. Marie Ry. Co. to the amount of $1,680,000 issued and sold to meet the cost of constructing 84 miles of railway added to that company's system.

There was a decided falling off in the sales of agricultural lands, the total area disposed of in the year being 164,450 acres, as against 994,840 acres in the previous year. The average price realized, however, was much better, being $9.54 an acre.

The contract with the Imperial Government for the carriage of the mails between Liverpool and Hong Kong was renewed for a further period of three years, but the rate of compensation per annum was reduced by £15,000.

The Alberta Ry. and Irrigation Co., owning 113 miles of railway in Southern Alberta, as well as an important colliery, and about 425,000 acres of land, part of which is served by irrigation ditches, was operated by its owners as a close friendly connection of your company, yielding to your lines a large revenue from traffic interchanged, and furnishing the company and settlers along the railway a supply of coal. To ensure a continuance of this desirable connection your directors deem it prudent for the company to secure such an interest in the property as will constitute a substantial control, and they have arranged to do this at an approximate cost of $2,000,000. Apart from the traffic advantages thereby safeguarded the investment itself will prove a profitable one.

The increase for the year in the item "Railway and Equipment" was abnormal, being in round figures $31,377,000, exclusive of an appropriation from surplus earnings of $3,800,000. Of this expenditure $7,500,000 was for new lines under construction; $10,400,000 for additional rolling stock, shops and machinery; $7,800,000 for double tracks and reduction of grades; and $9,500,000 for additional yards, buildings, sidings, and for general improvements to your property. Notwithstanding this outlay for improvements, and the falling off in traffic, the charges against the year's income for the upkeep of the property were continued on a liberal basis.

Pursuant to the authority given at the special general meeting of shareholders held Dec. 30, 1907, the directors offered to the shareholders at par $24,336,000 of the ordinary capital stock of the company. Practically the whole amount was taken and payments were made in anticipation of the dates mentioned in the circular. This leaves $3,984,000 still unissued, but in order that you may be in a position to provide additional money from this source, if and when necessary, your directors thought it wise to ask the consent of the Governor-General in Council to a further increase in the ordinary capital stock from $150,000,000 to $200,000,000. This consent has been formally given, and you will be asked at the special general meeting of the shareholders, to be held Oct. 7, to sanction and approve the increase in the authorized ordinary capital stock, and to take such other measures as will enable your directors to utilize it in such amounts from time to time as may be desirable in connection with the company's capital requirements. While recommending this increase as a precautionary measure, there is no immediate necessity for issuing any portion of the additional amount, as you have ample funds in hand, but with your vast property in a growing country, the demands for works, and more particularly for rolling stock, involving large outlay, are sure to continue, and your directors should be in a position to meet these promptly when they arise.

In order to conform to a practice that is becoming quite general, more particularly in Europe, your directors have had the balance sheet and accounts examined and certified by a firm of well-known chartered accountants, and it is their intention to pursue the same course in future years.

Your directors regret to report the death on June 4 of Sir Robert G. Reid, who joined the Board in 1903, and was a most esteemed and useful member. In April last you met with another serious loss in the death of Charles Drinkwater, who had been Secretary of the company since its incorporation, and who during the last nine years had also been Assistant to the President. Your directors desire to record their high appreciation of his devotion to the company's interests during his long term of service. During the year Hon. James Dunsmuir, of Victoria, B.C., and R. Meighen, of Montreal, were elected directors of the company to fill vacancies caused by the retirement of C. H. Mackay and the death of Sir Robert G. Reid. The undermentioned directors will retire from office at the approaching annual meeting. They are eligible for re-election. Hon. Sir George A. Drummond, Sir Sandford Fleming, W. D. Matthews, R. Meighen.

CONDENSED BALANCE SHEET.

Railway and equipment		$285,088,099 41
Ocean, lake and river steamships		17,826,983 16
Acquired securities (cost)		57,418,368 83
Properties held in trust for the company		4,656,079 96
Deferred payments on land and townsite sales		14,022,665 79
Advances to lines under construction		3,523,720 01
Advances and investments		6,023,727 77
Material and supplies on hand		11,110,842 58
Current Assets:		
Agents' and conductors' balances	$1,424,255 15	
Net traffic balances	191,439 99	
Miscellaneous accounts receivable	3 960,818 37	
		5,576,513 51
Cash in hand		18,821,630 21
		$424,068,631 23

In addition to above assets, the company owns 8,777,825 acres of land in Manitoba, Saskatchewan and Alberta (average sales past year $9.54 per acre) and 4,490,542 acres in British Columbia.

Capital stock		$121,680,000 00
Payments on subscriptions to new issue		
Capital stock ($24,336,000.00		19,854,436 00
4% preference stock		48,803,332 38
4% consolidated debenture stock		115,657,077 88
Mortgage bonds—		
First mortgage bonds, 5%	$34,998,633 33	
Canada Central Ry., 6%	973,333 33	
Algoma branch, 1st mortgage	3,650,000 00	
		39,621,966 66
Current liabilities—		
Audited vouchers	$5,634,881 97	
Pay rolls	3,032,606 65	
Miscellaneous accounts payable	2,722,029 58	
		11,389,518 20
Interest on funded debt and rental of leased lines: Coupons due July 1, 1908, and including coupons overdue, not presented	$1,134,185 19	
Accrued fixed charges	201,816 36	
		1,336,001 55
Equipment obligations		1,912,987 26
Equipment replacement fund		870,283 00
Steamship replacement fund		2,340,666 67
Appropriation for additions and improvements		6,489,655 68
Reserve fund for contingencies		1,320,974 28
Land grant—		
Sales of land and townsites.		22,401,529 67
Surplus		30,390,202 00
		$424,068,631 23

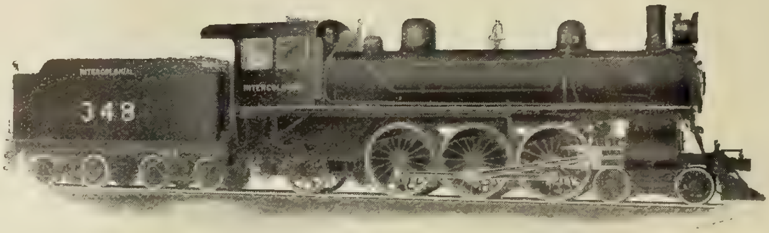
FIXED CHARGES FOR YEAR ENDED JUNE 30, 1908.

1st mortgage bonds 5%	$ 1,749,931 66
Canada Central Ry. 2nd mortgage 6% bonds	58,400 00
St. Lawrence & Ottawa Ry. 4% 1st mortgage bonds	38,933 34
Man. Southwestern Colonization Ry. 1st mortgage 5% bonds	127,200 00
Toronto, Grey & Bruce Ry. rental	140,000 00
Ontario & Quebec Ry. debenture stock, 5%	975,129 56
Ontario & Quebec Ry. ordinary stock, 6%	120,000 00
Atlantic & North-West Ry. 1st mortgage bonds (less Government proportion)	136,333 34
Algoma Branch 5% 1st mortgage bonds	182,500 00
Rental, Calgary & Edmonton Ry	138,357 60
" Farnham to Brigham Jct.	1,400 00
" Mattawamkeag to Vanceboro	23,800 00
" New Brunswick Ry. System	372,829 74
" Terminals at Toronto	29,570 20
" Terminals at Hamilton	33,884 32
" Hamilton Jct. to Toronto	42,070 66
" St. Stephen and Milltown Ry	2,050 00
" Lindsay, Bobcaygeon & Pontypool Ry	3,049 09
" Joliette and Brandon Ry	5,000 00
" Lachine Canal branch	854 16
Interest on Montreal & Western Ry. purchase	17,761 67
Interest on equipment obligations	129,889 98

4% CONSOLIDATED DEBENTURE STOCK.

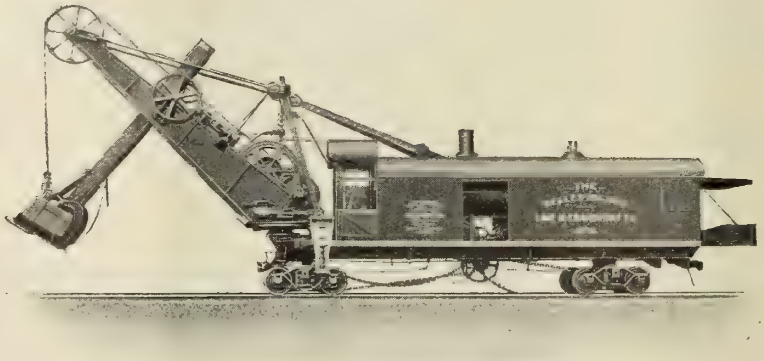
Interest from July 1, 1907	$4,323,576 45	
Interest from Jan. 1, 1908	125,554 94	
	$4,449,131 39	
Less received from subsidy Northern Colonization Ry.	8,000 00	
		$4,441,131 39
		$ 8,770,076 71

LOCOMOTIVES



Pacific Type Passenger Locomotive built for the Intercolonial Railway. Total weight of engine, 194,500 pounds. Weight on driving wheels, 132,000 pounds; diameter of driving wheels, 72 inches. Boiler pressure, 200 pounds. Maximum tractive power, 29,200 pounds.

STEAM SHOVELS



A high-class and powerful machine, absolutely reliable under all conditions of service.

MONTREAL LOCOMOTIVE WORKS, LTD.

BANK OF OTTAWA BUILDING, MONTREAL, CANADA.

RECEIPTS AND EXPENDITURES.

Cash in hand June 30, 1907			$21,394,951 93
Receipts—			
Surplus revenue as per statement			14,796,922 58
Land department—			
Lands and townsites			
Net proceeds of sales		$1,869,907 22	
Less amounts remaining in deferred payments		1,738,458 71	
		$131,448 51	
Collection of deferred payments on previous years' sales		3,570,405 69	
			3,701,854 20
Subscription to $24,336,000 00 additional ordinary stock—			
Payments on instalments			19,854,436 00
4% preference stock—			
Amount realized from issue of £1,000,000			4,890,670 65
Consolidated debenture stock—			
Amount realized from issue of £1,975,000			9,719,771 07
Add—			
Advances to lines under construction	$3,523,720 01		
Advances and investments	6,023,727 77		
Current assets	5,576,513 51		
		$15,123,961 29	
Amount at June 30, 1907		15,664,018 52	
			540,057 23
			$74,898,663 66

EXPENDITURES.

Dividends on preference stock—		
2% paid Oct. 1, 1907	$878,733 31	
2% paid April 1, 1908	940,340 45	
		$1,819,073 76
Dividends on ordinary stock—		
3½% paid Oct. 1, 1907	$4,258,800 00	
3½% paid April 1, 1908	4,258,800 00	
		8,517,600 00
Properties held in trust for the company		1,241,820 88
Construction of acquired and branch lines		7,565,714 55
Additions and improvements, main line and branches		14,130,303 21
Additions and improvements, leased and acquired lines		3,177,606 87
Rolling stock, shops and machinery		10,433,024 76
Ocean, lake and river steamships—		
Fitting Atlantic steamships for passenger service and providing cold storage facilities at Liverpool	169,350 21	
Additional steamships and appurtenances for Pacific coast service	482,030 85	
Additional river steamers and barges	76,958 08	
Payments balance account two new steamers	731,226 13	
Payment balance purchase tug Cruizer	7,640 41	
	$1,467,205 68	
Less sale of Steamships Athenian and Tartar	56,917 96	
		1,410,287 72
Securities Acquired:		
British Columbia Southern Ry. 5% 1st mortgage bonds	207,500 00	
Guelph & Goderich Ry. 1st mortgage bonds	412,500 00	
Nicola, Kamloops & Similkameen Coal & Ry. Co., 1st mortgage bonds	1,175,000 00	
Walkerton & Lucknow Ry., 1st mortgage bonds	740,000 00	
Minneapolis, St. Paul & Sault Ste. Marie Ry.:		
Ordinary stock	1,413,400 00	
Preferred stock	706,700 00	
	$4,655,100 00	
Less amount received from Canada North West Land Co. on 5,625 shares ordinary stock	42,187 83	
		4,612,912 17
(During the year North Shore Ry. Bonds which had been carried in acquired securities and also included in funded debt, were retired and cancelled, amounting to $616,119 67.		
Increase in material and supplies on hand		1,685,229 70
Payments of equipment obligations		327,049 41
Decrease in current liabilities.		1,156,410 42
		$56,077,033 45
Cash in hand.		18,821,630 21
		$74,898,663 66

CONSTRUCTION—BRANCH AND ACQUIRED LINES

Pheasant Hills branch	$4,166,217 09	
Wolseley-Reston branch	119,472 34	
Lachine canal branch	16,729 74	
Moose Jaw branch	194,467 91	
Bulyea branch	42,991 41	
Virden branch	1,537 02	
Stonewall branch—Teulon extension	25,584 05	
Stonewall branch — Icelandic River extension	5,940 43	
Selkirk branch—Gimli extension	133,057 68	
Lauder branch	22,879 04	
Weyburn branch	220,253 18	
Nicola, Kamloops and Similkameen Ry	6,986 42	
Surveys of projected lines	39,851 60	
		$4 995,967 91
Toronto-Sudbury line		2,569,746 64
		$7,565,714 55

EXPENDITURE ON ADDITIONS AND IMPROVEMENTS JULY 1, 1907, TO JUNE 30, 1908.

MAIN LINE			
Quebec to Bonfield:			
Additional sidings, buildings, stations and yards		$192,758 55	
Permanent bridges and improvements of line		508,317 18	
Wharves, docks and warehouses		14 00	
			$701,089 73
Montreal Terminals			591,665 89
Newport flour shed			101,794 95
Bonfield to Port Arthur:			
Additional sidings, buildings, stations and yards		$603,695 98	
Permanent bridges and improvements of line		209,399 47	
			813,095 45
Port Arthur to Laggan:			
Additional sidings, buildings, stations and yards		$1,059 547 27	
Permanent bridges and improvements of line		1,024,419 91	
Winnipeg station and hotel		90,023 83	
Winnipeg shops		269,276 14	
Winnipeg terminals		78,227 67	
Wharves, docks and warehouses		98,001 81	
Double-tracking		5,205,067 51	
Right of way		3,367 46	
			7,827,931 60
Laggan to Vancouver:			
Additional sidings, buildings, stations and yards		$346,629 73	
Permanent bridges and improvements of line		934,172 88	
Wharves, docks and warehouses		197,038 00	
			1,477,840 61
Victoria hotel			315,497 14
Lake Louise hotel			183,858 05
Total main line			$12,012,773 42
BRANCH LINES:			
Southwestern branch		$19,825 91	
Stonewall branch		2,436 56	
Selkirk branch		50,150 12	
Emerson branch		130,729 35	
Nakusp and Slocan branch		14,424 65	
Revelstoke and Arrow Lake branch		4 023 41	
Snowflake branch		1,590 78	
Waskada branch		2,402 50	
St. Lin branch		889 69	
Lake Temiskaming branch		21 00	
McGregor branch		1,617 93	
" " Brookdale-Varcoe extension		1,416 27	
Mission branch		37,429 99	
Arcola—Regina branch		58,039 62	
Pheasant Hills branch		1,769 90	
Souris branch:			
Additional sidings, buildings, stations and yards		137,056 17	
Permanent bridges and improvements of line		217,182 04	
Algoma branch:			
Additional sidings, buildings, stations and yards		23,696 59	
Permanent bridges and improvements of line		2,642 59	
Crow's Nest Pass branch			
Additional sidings, buildings, stations and yards	$178,840 02		
Permanent bridges and improvements of line	238,705 10		
Right of way	111 00		
		417,656 12	
Crow's Nest Pass branch:			
McLeod—Lethbridge deviation		432,896 89	
British Columbia Southern Ry.:			
Additional sidings, buildings, stations and yards	$67,945 71		
Permanent bridges and improvements of line	91,368 54		
Wharves, docks and warehouses	666 79		
Right of way	24,356 73		
Balfour extension	2,323 79		
Yahk branch	34,788 58	$221,450 14	
			$1,779,348 22
Brought forward			$13,792,121 64
Telegraph extensions and additions			162,219 35
Office building, London, England			26,668 74
Rented and temporary sidings			149,293 48
Total, main line and branches			$14,130,303 21

EXPENDITURE ON LEASED AND ACQUIRED LINES, JULY 1, 1907, TO JUNE 30, 1908.

Ontario and Quebec Ry:		
Additional sidings, buildings, stations and yards	$489,219 65	
Permanent bridges and improvements of line	200,166 11	
Double track, St. Anne's to Smith's Falls	752,927 74	
Grade revision	149,723 15	
		$1,592,036.65
Atlantic and North-West Ry.:		
Additional sidings, buildings, stations and yards	$34,119 54	
Permanent bridges and improvements of line	113,374 45	
Right of way	200 00	
		147,693 99
New Brunswick Ry.:		
Additional sidings, buildings, stations and yards	$47,019 22	
Permanent bridges and improvements of line	268,276 38	
Wharves, docks and warehouses	661 26	
Right of way	807 75	
		316,764 61
Montreal and Western Ry.:		
Additional sidings, buildings, stations and yards	$4,261 59	
Permanent bridges and improvements of line	35,256 01	
Account purchase of road	10,062 22	
		49,579 82
Manitoba South-Western Colonization Ry.:		
Additional sidings, buildings, stations and yards	$25,265 47	
Permanent bridges and improvements of line	57,078 78	
		82,344 25
Columbia and Kootenay Ry.:		
Additional sidings, buildings, stations and yards	$4,978 49	
Permanent bridges and improvements of line	884 18	
		5,862 67
Manitoba and North-Western Ry.:		
Additional sidings, buildings, stations and yards	$36,324 80	
Permanent bridges and improvements of line	18,816 82	
Right of way	162 50	
		55,304 12
Great North-West Central Ry.:		
Additional sidings, buildings, stations and yards	$3,162 21	
Permanent bridges and improvements of line	8.656 07	
Right of way and completion of line	6,196 76	
		18,015 04
Calgary and Edmonton Ry.:		
Additional sidings, buildings, stations and yards	$284,070 67	
Permanent bridges and improvements of line	198,823 39	
		482,894 06
Columbia and Western Ry.:		
Additional sidings, buildings, stations and yards	$21,658 16	
Permanent bridges and improvements of line	215,648 84	
Right of way and completion of line	93,481 80	
		330,788 80
Montreal and Ottawa Ry.:		
Additional sidings, buildings, stations and yards	$3,915 57	
Permanent bridges and improvements of line	13,678 90	
Right of way and completion of line	52,695 34	
		70,289 81
Joliette and Brandon Ry.		1,861 89
Lindsay, Bobcaygeon and Pontypool Ry.		24,171 16
		$3,177,606 87

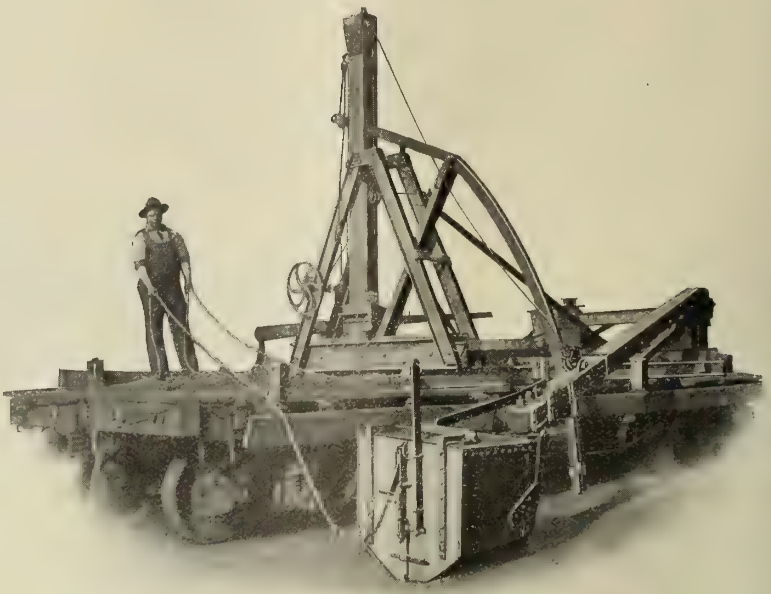
EARNINGS, YEAR ENDED JUNE 30, 1908

Passengers	$19,900,432 07
Freight	44,037,597 97
Mails	739,755 59
Sleeping cars, express, elevators, telegraph and miscellaneous	6,706,388 09
Total	$71,384,173 72

WORKING EXPENSES YEAR ENDED JUNE 30, 1908.

Transportation expenses	$24,112,713 82
Maintenance of way and structures	10,410,751 61
Maintenance of equipment	9,358,138 48
Traffic expenses	1,734,086 57
Parlor and sleeping car expenses	395,628 72
Expenses of lake and river steamers	750,197 84
General expenses	1,942,756 25
Commercial telegraph	887,534 41
Total	$49,591,807 70

The Mahoney Railroad Ditching Machine



Is designed to reduce the cost of roadbed ditching.

Makes a perfect standard ditch.

Does the work better, quicker and cheaper than can be done by hand.

Does work that cannot be done by hand.

Never strikes and is always ready for work.

Will do the work of 75 to 150 men.

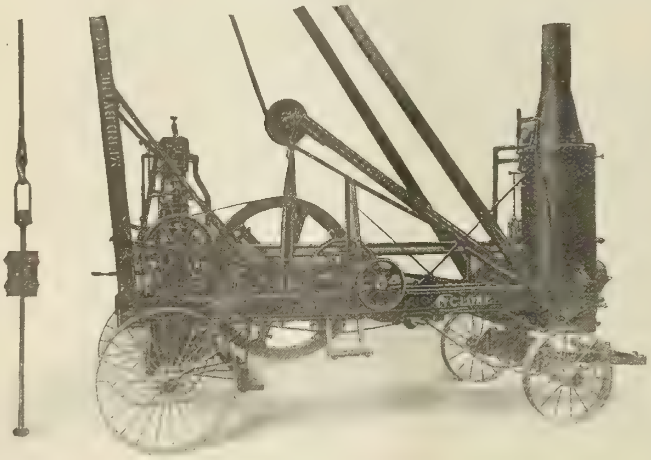
Is one of the greatest labour-saving devices of modern times.

Has been tried and tested and not found wanting.

Is constructed to withstand the very roughest use.

Is built of the very best materials only.

CATALOGUE WITH FULL DESCRIPTION MAILED ON APPLICATION.



Cyclone Blast Hole Drills

Are especially designed for Railroad Contractors, Quarries, etc., and represent the outcome of exhaustive experimental work and practical trials on rock work in connection with steam shovels. The result has fully justified their taking a leading place amongst the Railroad Contractor's equipment, and during the last few years they have come into prominence, and are now recognized as effecting an immense saving for drilling deep blast holes in any kind of rock. Several in use on the Grand Trunk Pacific.

WRITE FOR PRICES

MUSSENS LIMITED

Montreal **Toronto** **Cobalt** **Winnipeg** **Vancouver**

EQUIPMENT AT JUNE 30, 1908.

Locomotives	1,399
First and second-class passenger cars, baggage cars, and colonist sleeping cars	1,382
First-class sleeping, dining and café cars	245
Parlor cars, official and paymasters' cars	57
Freight and cattle cars (all kinds)	44,692
Conductors' vans	777
Board, tool and auxiliary cars and steam shovels	2,726

OCEAN, LAKE AND RIVER STEAMERS.

ATLANTIC SERVICE—Empress of Britain, Empress of Ireland, Lake Manitoba, Lake Champlain, Lake Michigan, Mount Temple, Montcalm, Montfort, Lake Erie, Montrose, Montreal, Milwaukee, Mount Royal, Montezuma, Monmouth, Cruizer.

PACIFIC SERVICE—Empress of India, Empress of Japan, Empress of China, Monteagle.

PACIFIC COAST SERVICE—Amur, Beaver, Charmer, Otter, Princess Beatrice, Transfer, Princess Charlotte, Princess Royal, Princess May, Princess Victoria, Queen City, R. P. Rithet, Tees, Princess Ena.

UPPER LAKE SERVICE—Manitoba, Athabasca, Alberta, Keewatin, Assiniboia.

BRITISH COLUMBIA LAKE AND RIVER SERVICE—Aberdeen, Kokanee, Minto, Moyie, Nelson, Rossland, Kuskanook, Columbia, Okanagan, Proctor, Sandon, Slocan, York, Kootenay, Valhalla, Ymir.

FERRY SREVICE—Michigan, Ontario.

DESCRIPTION OF FREIGHT FORWARDED.

	1906-7	1907-8
Flour, brls	6,256,702	5,843,988
Grain, bush	93,207,009	88.345,234
Live stock, head	1,537,467	1,349,771
Lumber, ft	1,989,444,728	1,764,445,495
Firewood, cords	274,629	249,605
Manufactured articles, tons	4,385,854	3,981,888
All other articles, tons	4,794,295	5,102,116

FREIGHT TRAFFIC.

	1906-7	1907-8
No. of tons carried	15,733,306	15,040,325
No. of tons carried one mile	5,946,779,961	5,865,089,008
Earnings per ton per mile	0.77 cts.	0.75 cts.

PASSENGER TRAFFIC.

	1906-7	1907-8
No. of passengers carried	8,779,620	9.463,179
No. of passengers carried one mile	1,064,564,999	1,052,010,356
Earnings per passenger per mile	1.83 cts.	1.89 cts.

TRAIN TRAFFIC STATISTICS.

TRAIN MILEAGE.

	1907-8	1906-7
Passenger trains	13,196,093	12,413,638
Freight "	17,788,649	18,187,263
Mixed "	1,798,673	1,411,870
Total trains	32,783,415	32,012,771

CAR MILEAGE.

	1906-7	1907-8
PASSENGER—		
Coaches and P.D and S. cars.	63,744,049	63,025,195
Combination cars	2,875,441	2,437,214
Baggage, mail and express cars	26,689,471	22,938,884
Total passenger cars	93,308,961	88,401,293
FREIGHT—	1906-7	1907-8
Loaded	327,388,310	347,181,189
Empty	94,125,570	83,131,642
Caboose	18,735,988	19,646,800
Total freight cars	440,249,868	449,959,631
Passenger cars per traffic train mile	6 22	6.39
Freight cars per traffic train mile.	22 48	22.96

PASSENGER TRAFFIC.

	1906-7	1907-8
Passengers carried (earning revenue)	9,334,811	8,671,438
Passengers carried (earning revenue) one mile	1 038,393,535	1,052,286,316
Passengers carried (earning revenue) one mile per mile of road	112,716	117,330
Average journey per passenger ... miles	111.24	121.35
Average amount received per passenger ... $	2.08	2.17
Average amount received per passenger mile ... cts.	1.87	1.79
Average number of passengers per train mile	69.25	76.10
Average number of passengers per car mile	15.58	16.38
Revenue from passengers per passenger car mile ... cts.	29.15	29.35
Total passenger train earnings per train mile ... $	1.56	1.63
Total passenger train earnings per mile of road ... $	2,537.42	2,519.17

FREIGHT TRAFFIC.

	1906-7	1907-8
Tons of revenue freight carried one mile	5,699,092,014	5,789,191,940
Tons non-revenue freight carried one mile	984,489,076	870,757,856
Total tons (all classes) freight carried one mile	6,683,581,090	6,659,949,796
Tons of revenue freight carried one mile per mile of road	618,626	645,532
Tons of non-revenue freight carried one mile per mile of road	106,864	97,095
Total tons (all classes) freight carried one mile per mile of road	725,490	742,627
Average amount received per ton per mile of revenue freight. cts.	0.755	0.776
Average no. of tons of revenue freight per train mile	290.96	295.38
Average no. of tons of non-rev. freight per train mile	50.26	44.46
Average no. of tons of (all classes) freight per train mile	341.22	339 84
Average no. of tons of revenue freight per loaded car mile	17.41	16.67
Average no. of tons of non-rev. freight per loaded car mile	3.01	2.51
Average no. of tons of (all classes) freight per loaded car mile	20.42	19.18
Freight train earnings per loaded car mile ... cts.	13.14	12.94
Freight train earnings per train mile ... $	2.20	2.29
Freight train earnings per mile of road ... $	4,671.13	5,009.18

The earnings of lake and river steamers are not included in this statement.

STATEMENT OF PENSION DEPARTMENT TO JUNE 30, 1908.

Balance at June 30, 1907	$ 592,882 15
Contributed by company for year	80,000 00
Received as interest	35,158.42
	$ 708,040.57
Payment of pension allowances for year	50,694.97
Balance in cash and investments	$ 657,345.60

NUMBER ON PENSION ROLL AT JUNE 30, 1908.

Under 60 years of age	23
Between 60 and 70 years of age	148
Over 70 years of age	105
Total	276

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-08, from July 1, 1908:

	Earnings.	Expenses.	Net Earnings.	Net Increase or Decrease.
July	$728,500	$ 525,600	$ 202,900	$159,000 –
Inc. or Dec.	$295,700 –	$136,700 –	$159,000 –	

Approximate earnings for Aug., $747,400, against $779,300 for Aug., 1907; and for 2 weeks ended Sept. 14, $378.100, against $376,600 for same period 1907.

Mileage operated, 2,874.

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-8, from July 1, 1908:—

	Earnings.	Expenses.	Net Profits.	Net Increase or Decrease.
J'ly	$6,292,880.82	$4,018,307.57	$2,274,573.25	$232,279.41 –
Inc. or Dec.	$715,393.64 –	$483,114.23 –	$232,279.41 –	

Approximate earnings for Aug., $6,254,000 against $6,900,000 for Aug., 1907; and for 2 weeks ended Sept. 14, $2,732,000 against $2,904,000 for same period 1907.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for July, $238,818.77; total expenses, $256,596.56; deficit, $17,777.79; against $338,423.57 gross earnings; $320,396.53 total expenses; and $18,027,04 surplus for July, 1907. Approximate earnings for Aug., $234,773, against $348,511 for Aug., 1907.

MINERAL RANGE RD.—Gross earnings for July, $73,826.80; total expenses, $73,675.83; surplus, $150.97; against $73,682.41 gross earnings; $69,892.73 total expenses; and $3,789.68, surplus for July, 1907. Approximate earnings for Aug., $70,437; against $75,273 for Aug., 1907.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for July, $950,108.98; expenses, $556,808.02; net earnings, $393,300.96; against $1,094,889.88 gross earnings; $688,455.33 expenses; $406,434.55 net earnings for July 1907. Approximate earnings for Aug., $994,983, against $994,354 for Aug., 1907.

Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G.T.R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for July, as compared with July, 1907:

GRAND TRUNK RAILWAY.

	1908	1907
Earnings	$2,562,200	$3,069,500
Expenses	1,818,100	2,231,150
Net earnings	$ 744,100	$ 865,350

CANADA ATLANTIC RAILWAY.

Earnings	$ 183,900	$ 199,000
Expenses	159,600	183,000
Net earnings	$ 24,300	$ 16,000

GRAND TRUNK WESTERN RAILWAY.

Earnings	$ 468.800	$ 539,500
Expenses	424,400	483,300
Net earnings	$ 44,400	$ 56,200

DETROIT, GRAND HAVEN & MILWAUKEE RY.

Earnings	$ 148,900	$ 166,240
Expenses	106,300	145,420
Net earnings	$ 42,600	$ 20,820

Approximate earnings for Aug., $3,483,778, and for 2 weeks ended Sept. 14, $1,646,462; against $4.097.888 and $1,931,834 for similar periods respectively in 1907.

TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from July 1 to Aug. 31:

	1908.	1907.	Increase.	Decrease.
Grand Trunk	£1,056,915	£1,282,773	....	£225,858
Canada Atlantic	76,916	83,897	...	6,981
G. T. Western	202,573	233,122	....	30,549
D. G. H. & M.	61,656	73,594	....	11,938
Total	£1,398,060	£1,673,386		£275,326

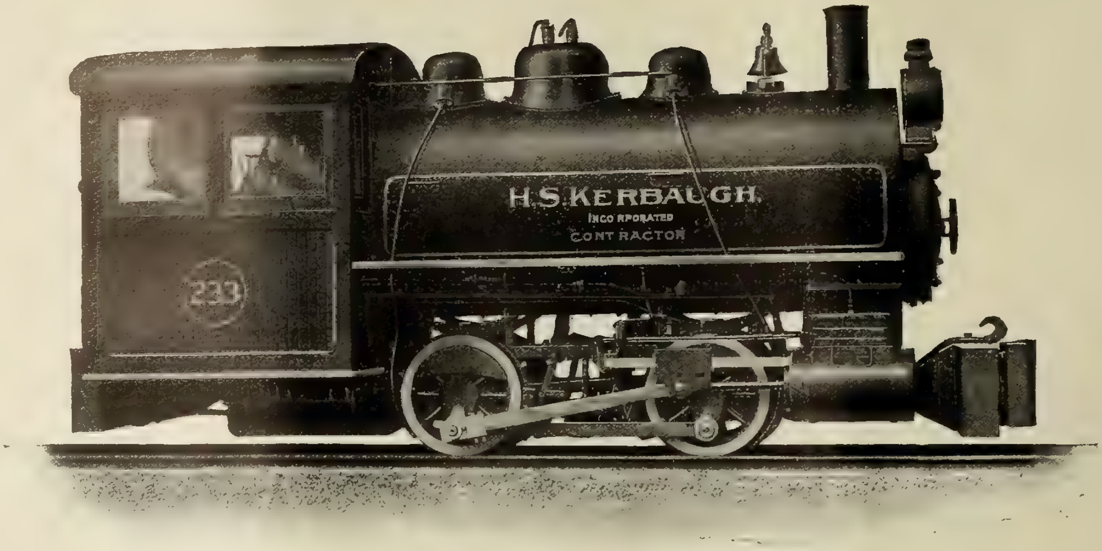
Mileage operated 4,523.

The C.P.R. and the Y.M.C.A.

Buildings have been opened at Schreiber and Chapleau, and another is under construction at Kenora, Ont., on the C.P.R. Transcontinental line, in connection with the Railway Y.M.C.A. The buildings recently opened at Schreiber and Chapleau each provide for 44 men in the dormitories, and have a dining-room seating 48; three bowling alleys in the basement, two billiard tables, reception room with large open fireplaces made of rough stones, bathrooms, reading rooms, smoking rooms, lockers, etc. The building in course of construction at Kenora, which is to cost about $30,000, is expected to be ready for use about Jan. 1, 1909.

The general plan on which these buildings are operated is as follows: The railway company makes a monthly appropriation sufficient to cover the salary of the Secretary, in addition to providing light, heat, repairs, etc. The men pay a fee of $5, which covers use of baths, reading room and general social privileges of the building. They pay $1.25 a week for a room and $4.50 a week for board. The operation of the building is in the hands of a local committee, composed for the most part of railway men. When these two buildings were formally opened, H. H. Vaughan, Assistant to the Vice-President, stated that they were given to the Y.M.C.A. to operate because of its unselfish purpose to be of service to railway men without financial gain. Boarding houses had been erected by the company and given over to individuals, who made out of them what they could. This had not been altogether satisfactory, and now the company is trying an experiment with the Railway Department of the Y.M.C.A. The satisfactory working of one building at Revelstoke, B.C., during the past two years had induced the company to increase the number of points at which these buildings were established.

Government Ownership of Railways.—Speaking at Niagara Falls, Ont., Sept. 15, Sir Wilfred Laurier said: "Men there are in the country who believe that the Government should own and develop all the railways. This is not my view. I do not think that we should operate the railways which carry the traffic of Ontario, the Grand Trunk and the Canadian Pacific, but I believe that we should take measures, and we are taking measures, to have railway transportation supervised and controlled, not by the companies, but by an authority appointed by the Government, and this is the purpose for which we established the Railway Commission. You know the benefit which you have already received from that Commission. If you have a railway crossing or a difficulty with a railway, or if they are overcharging your freight, you have a Commission which will come on the spot and give you the relief to which you are entitled."



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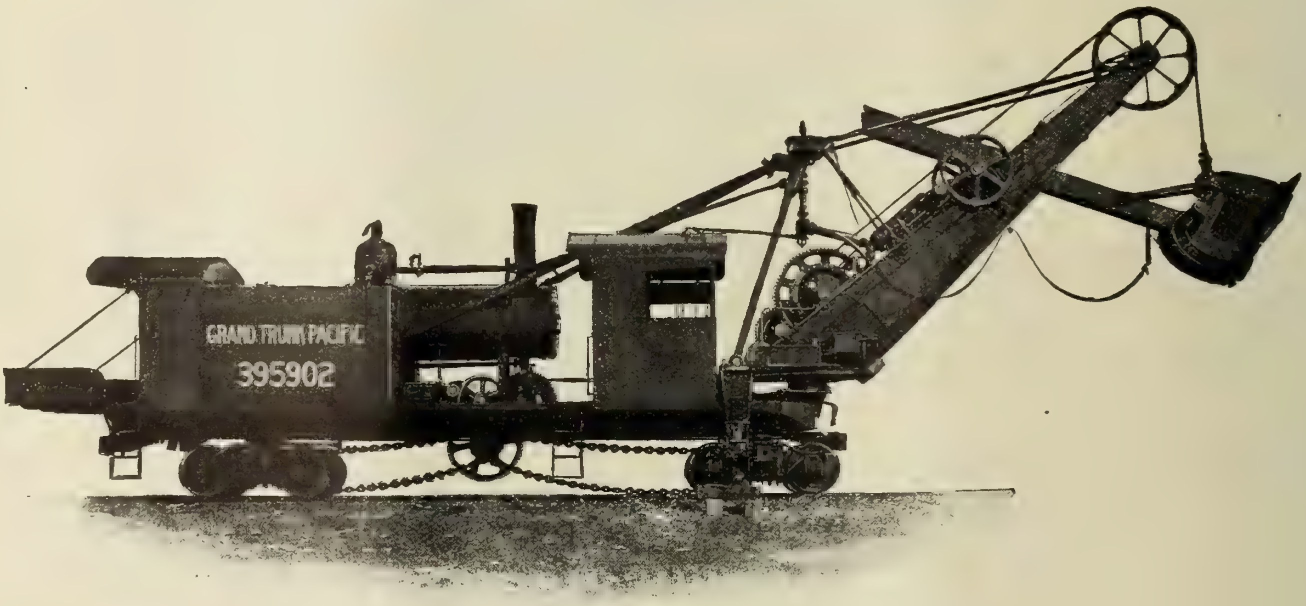

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Intercolonial Railway Connecting Lines.

Press reports stated recently that a commission had been appointed to enquire into the equipment, conditions and business outlook on the branch, or rather connecting lines of the I.C.R. in Nova Scotia, New Brunswick and Quebec, and that the investigation to be made was preliminary to the acquisition by lease or purchase of lines which could produce a profit to the I.C.R. We are officially advised that the use of the word "commission" is a mistake, as no commission has been appointed. During the last session of the Dominion Parliament, the question of the advisability of securing for the I.C.R. at least some of the lines connecting with it as feeders was discussed, and it was urged that if the I.C.R. was not a Government road, some of these feeding lines would become part of the system as a business proposition. The Minister of Railways promised in a speech in the House that during recess he would have an investigation made as to the possibilities of the connecting lines, and as a consequence E. Tiffin, General Traffic Manager I.C.R.; D. A. Storey, General Freight Agent I.C.R., and W. A. Bowden, Engineer of the Department of Railways and Canals, have been authorized to make an investigation so that the Minister and the Government may be in a position to consider the whole matter intelligently.

A resolution was unanimously passed by the Nova Scotia Legislature at its last session calling upon the Dominion Government to acquire the various short independent lines in that province on a basis of their original cost and present earning capacity, and operate them in connection with the I.C.R. as branch lines. The late Government of New Brunswick had previously made application to the Dominion Government to take over the short lines in that province for operation as I.C.R. branches. The matter was brought before the notice of the House of Commons last session by the ex-Minister of Railways, Mr. Emmerson.

In the fall of 1907 the then Government of New Brunswick appointed G. Brown, C.E., and T. M. L. Burns, M.L.A., to inspect and report upon the lines connecting with the I.C.R. in the province, and a report dealing with them was subsequently presented. The report states that: "The Commissioners travelled over each of the lines, inspected thoroughly bridges, stations and all conditions connected therewith. In general they found all the properties noticeably improved during recent years. Considerable amounts have been expended in rails, bridges, rolling stock, etc., and all properties have been brought up to a better standard. Wooden bridges and trestles are the curse of most of these branch lines. On most of the roads there are a great many such structures, some of them of great length, and they are all a constant source of annoyance, expense and danger. The Kent Northern, the Beersville, and the York and Carleton have no bridges, and this fact contributes largely to the excellent financial showing made by the Kent Northern in particular. A great many of the Howe truss bridges of the different lines are old and nearly worn out, and it will be necessary to rebuild these in a very short time. Nearly all the lines are poorly equipped with snow-fighting appliances, and so a number close down when deep snow comes. The Kent Northern is an exception. There is a scarcity of ballast on all branches. In some cases this is excusable. Another big factor in maintenance of good track is plenty of ties. In this lumber country, where ties may be bought comparatively cheap, it is inexcusable that they are not better sleepered. A large percentage of the rails laid on the branches are excellent, and quite heavy enough for the uses and in good condition. The locomotives as a rule are in working order. They are light and well adapted to the light traffic. The rest of the rolling stock is only in fair condition. The passenger cars are all old and not in particularly good order. The St. Martins Ry. has two splendid passenger cars, however. Practically all of the freight is handled by the trunk lines. Both passenger and freight traffic have increased remarkably in the last few years, and the present year will probably show a still further increase. The number of passengers carried has increased in the last five years from 22% to 158%, and freight has increased 18%. The Kent Northern and the York and Carleton show an unusual increase. The gross earnings show an increase of 21% over 1901. Operating expenses on all lines except two have increased considerably in five years. This has kept net earnings down, but still there is a gratifying increase. In 1901 six out of the nine lines showed a deficit. In 1906, the condition was reversed. In 1901 deficits of the nine lines were $3,764. In 1906 the surpluses were $10,650. From 1901 to 1906 inclusive, 419,893 passengers were carried on the nine connecting lines. Not one of these was killed and only two injured. Six of the nine lines had no accidents. From 1901 to 1906 there were 1,097,218 tons of freight carried by these connecting railways."

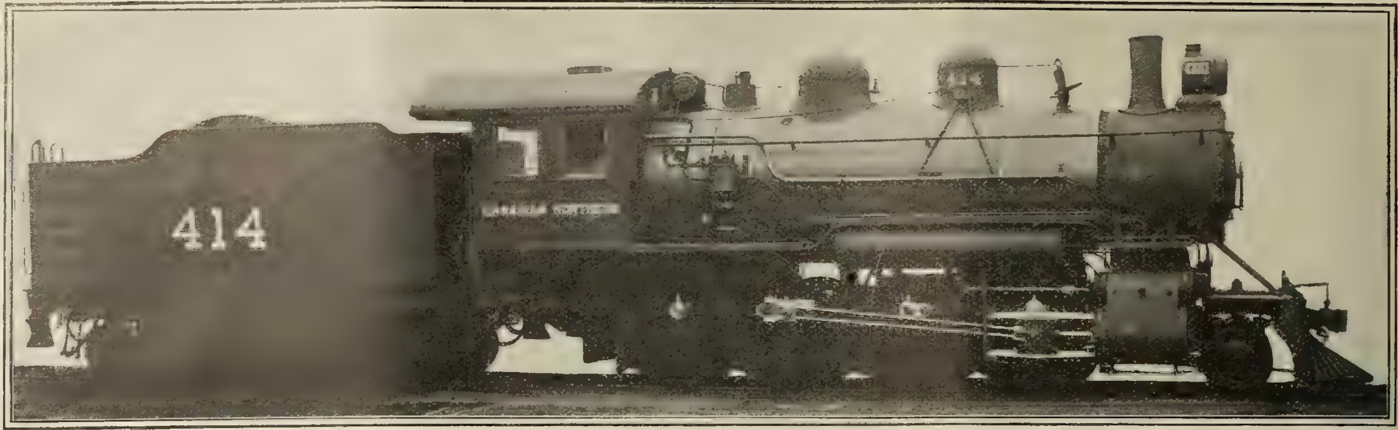
Information with respect to the lines in Nova Scotia which it is suggested should be acquired is contained in the report of the Provincial Engineer, a summary of which appeared in our September issue.

Of the lines connecting with the I.C.R., there are a number that can be at once eliminated from further consideration, notably the Quebec, Montreal and Southern Ry., owned by the Delaware and Hudson Co., a United States corporation; the Quebec Central Ry., and the Temiscouata Ry., owned or controlled by the same interests in Great Britain, which contemplates connecting the two lines and amalgamating them into one system: the Halifax and South Western Ry., and the Inverness Ry. and Coal Co.'s line, owned by Mackenzie, Mann & Co. interests, and destined to form part of the Canadian Northern Ry.'s completed system, and the Dominion Atlantic Ry., operated in connection with a steamship line to Boston, Mass., by a British company. There are also some other lines owned by coal mining companies, which are connected with the I.C.R. In this category are the Sydney and Louisburg Ry., owned by the Dominion Coal Co., the Nova Scotia Steel and Coal Co.'s railway, the Cumberland Ry. and Coal Co.'s line, and a number of smaller lines in Nova Scotia and New Brunswick. Apart from these lines there are in the three provinces of Nova Scotia, New Brunswick and Quebec, a number of lines carrying on a general railway business which can be classed strictly as branch or connecting lines of the I.C.R. The lines in Quebec are the Lotbiniere and Megantic Ry., and the Atlantic and Lake Superior Ry. Both lines, however, are at present in the position of extension, and if these plans materialize to any considerable extent, the usefulness of the lines as branches of the I.C.R. will be destroyed, as the apparent object of the new construction is to effect connection with lines at or near the United States boundary. The duty of the investigating officials will, therefore, practically resolve itself into an examination of the traffic possibilities of one railway in Nova Scotia and nine branches, representing 12 lines in New Brunswick. Statistics showing the earnings and expenses, etc., of these several companies—the latest at present available—were published on pg. 105 of our Feb. issue, and pg. 237 of our April issue. The additional information showing capitalization, subsidy aid and rolling stock owned, is given in the table on this page.

Railway	Mileage	Capital.			Subsidies.			Rolling Stock		
		Stock	Bonds	Misc.	Dom.	Prov.	Municipal	Loco.	Pass. cars	Fr'ght cars
Nova Scotia										
Cape Breton	31.00	$1,000,000						3	4	50
New Brunswick										
Buctouche and Moncton	32.00	250,000		$60,000	$101,600	$94,500		2	4	42
Caraquet	68.00	950,000	$500,000	19,279				3	2	30
Gulf Shore	16.78	6,250								
Elgin and Havelo'k	28.00	44,900	50,000					2	2	8
Hampton and St. Martins	30.00	99,000	90,000		83,612	145,600		1	2	7
Kent Northern	27.00	75,000	50,000		58,334	135,000		2	2	1
St. Louis and Richibucto	7.00	20,000			22,400	21,000				
N.B. Coal and Ry. Co.	58.00				190,400	139,000		5	3	72
N.B. and P.E.I.	36.00	214,845	73,500		113,000	97,708		3	3	45
Salisbury and Harvey	50.00	150,000			29,391	455,000	$70,000	3	3	34
Albert Southern	19.00	125,920			54,460	48,680				
Harvey branch		32,500			5,553	9,000				
York and Carleton	5.75	34,320			18,336	18,997		2	1	3
Total	409.53	$3,002,735	$763,500	$79,279	$677,086	$1,164,485	$70,000	26	26	292

Train Service at Omemee.

The Board of Railway Commissioners issued order 5260 Sept. 1 as follows: In the matter of the Municipal Council of the Corporation of the County of Victoria and the Township of Emily, Ontario, complaining that by reason of the location of the G.T.R. station at the Village of Omemee, Ont., the inhabitants of the village are subjected to great inconvenience, expense, and loss; that the railway conditions existing at Omemee are unreasonable and not in the interests of the community; and asking for such relief as justice to complainants may demand. Upon hearing the representatives for the complainants and counsel for the G.T.R., and what was alleged, and the consent of the Board of Trade and Council of Omemee and the G.T.R. filed—the Board orders that the G.T.R. train service be as follows, namely: That all trains each way stop at the outer or junction station, as at present: That at the inner, or new downtown platform, the following trains stop: The noon mail train leaving Toronto at 7.50 a.m., via Lindsay and Peterboro. Either the evening mail train leaving Toronto at 5 p.m., or the evening flyer, leaving Toronto later. The morning flyer from Peterboro to Toronto. The evening mail train, leaving Peterboro at 5 p.m. for Lindsay and Toronto. The alternate proposal to be determined by the Omemee Council. The Board further orders that the train service herein provided for be brought into operation not later than Sept. 15. And that the platform be placed from the sidewalk on Sturgeon St. westward.



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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

5194. Aug. 18.—Approving local mileage freight tariff C.R.C. 1 of Brantford and Hamilton Electric Ry., to be designated as the "Standard Freight Mileage Tariff."

5195. Aug. 18.—Approving local passenger tariff of the Brantford and Hamilton Electric Ry. with following exceptions: That the toll between stations 5 and 11 read 5 instead of 10c., and that the toll between stations 5 and 13 read 10 instead of 15c.

5196. Aug. 18.—Extending until Sept 15, time within which the Q.M. & S. Ry. may cross the G.T.R. track, at rail level, near St. Gregoire Station, Que.

5197. Aug. 19.—Extending until Sept. 1, time within which the C.P.R. may install bell at railway crossing Dorchester St., Quebec.

5198. Aug. 19.—Authorizing Bell Telephone Co. to cross with its wires the P.M.R. one mile north of Port Stanley station, Ont.

5199. Aug. 19.—Authorizing Bell Tel. Co. to cross with its wires the C.N.O.R. at Parry Sound, Ont.

5200. Aug. 19.—Authorizing C.P.R. to cross certain streets in Calgary, Alta., with spur to Fairchild Co. and Wm. Gray & Sons' premises.

5201. Aug. 19.—Authorizing C.P.R. to construct spurs to Fairchild Co. and Wm. Gray & Sons' premises, Calgary, Alta.

5202. June 24.—Authorizing C.P.R. to construct spurs at Terrebonne, Que.

5203. Aug. 22.—Extending for 12 months from Aug. 22, 1908, order authorizing G.T.R. to complete the passenger station and passenger station yards at Toronto, authorized by order dated Feb. 23, 1905.

5204. Aug. 20.—Authorizing Essex Terminal Ry. to cross the C.P.R. on gravel road, Sandwich West tsp., Ont.

5205. Aug. 20.—Authorizing C.P.R. to construct bridge 87.37 over Hamilton Creek, on Alberni extension of Esquimalt & Nanaimo Ry., B.C.

5206. Aug. 20.—Authorizing Yellow Grass Rural Telephone Co. to erect wires across C.P.R. at five different points Saskatchewan.

5207. Aug. 20.—Authorizing C.P.R. to construct bridge 87.12 over Harry Creek, on Alberni extension of Esquimalt & Nanaimo Ry., B.C.

5208. Aug. 20.—Authorizing C.P.R. to construct a spur line at Calgary, Alta., from end of spur already constructed for R. C. Thomas, to the Canadian Port Huron Co.'s premises.

5209. Aug. 20.—Authorizing Ontario Pipe Line Co. to lay gas pipe under G.T.R. at Victoria Ave., Hamilton, Ont.

5210. Aug. 20.—Authorizing C.P.R. to construct spur to the Detonite Explosive Co.'s premises, Vaudreuil County, Que.

5211. Aug. 18.—Authorizing Milestone Southwestern Telephone Co. to erect wires across C.P.R. on Carrington St., Milestone, Sask.

5212. Aug. 25.—Authorizing G. Poulin to erect electric light wires across C.P.R. at Farnham, Que.

5213. Aug. 25.—Authorizing Barton & Binbrook Telephone Co. to erect wires across G.T.R. near Rymal station, Ont.

5214. Aug. 23.—Authorizing C.N.O.R. to construct its railway across highways in Clarence tsp., at mileage 29, 30, 31, 32 and 33, and across Mill St., Rockland, Ont.

5215. Aug. 23.—Authorizing C.P.R. to divert public road from lot 15, Brighton parish, N.B., to lot 11, Northampton parish, also in part of lot 10, and from lot 9 to lot 8, Northampton parish.

5216. Aug. 25.—Authorizing Wilbur Iron Ore Co. to erect wires across K. & P. Ry. at Lavant, Ont.

5217. June 23.—Authorizing C.P.R. to construct road from proposed new station location at mile post 22 to the road that runs to Bolton Village, Ont., from the 6th line.

5218. Aug. 25.—Authorizing the Bell Telephone Co. to erect aërial wires across the C P.R. at highway at Nipissing Jct., Ont.

5219. Aug. 25.—Authorizing town of Kenora to erect transmission wires across C.P.R. at Hamilton St.

5220. Aug. 21.—Authorizing Northern Pipe Line Co. to lay pipe under C.P.R. in Raleigh tsp., Ont.

5221. Aug. 15.—Dismissing application of C.P.R. to fix compensation to be paid by G.T.R. for use of C.P.R. right-of-way and tracks between Nipissing Jct. and North Bay, Ont., and the C.P.R. terminal stations and station grounds at North Bay, and allowing appeal to Supreme Court of Canada.

5222. Aug. 26.—Authorizing City of Winnipeg to erect electric wires across C.P.R. to reach pumping station 6.

5223. Aug. 26.—Approving G.T.R. by-laws authorizing freight and passenger traffic officers to prepare and issue tariffs of tolls to be charged for carriage of freight and passenger traffic.

5224. Aug. 25.—Interswitching at St Thomas, Ont. This order is given in full on another page.

5225. Aug. 26.—Authorizing T.H. & B. Ry. to reduce headway of subway or undercrossing of its branch line under the G.T.R. in Barton tsp., Ont., from 17½ ft. to 16 ft. 10 ins.

5226. Aug. 27.—Authorizing Lakefield Portland Cement Co. to lay iron pipe line under C.N. Quebec Ry.'s tracks, where same intersect the Lakefield Portland Cement Co.'s land easterly three acres of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5227. Aug. 27.—Authorizing Lakefield Portland Cement Co. to erect power and telephone lines across C.N. Quebec Ry.'s tracks where same intersect the Lakefield Portland Cement Co.'s land easterly three acres of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5228. Aug. 27.—Authorizing the Saskatchewan Public Works Department to construct a highway across C.P.R. tracks in the s.w. ¼ of sec. 2, tp. 18, range 14, w. 2nd mer., being about ½ a mile east of Qu'Appelle station, Sask.

5229 to 5237. Sept. 1.—Authorizing Bell Telephone Co. to cross G.T.R. and C.P.R. tracks at nine different points in Ontario and Quebec.

5238. Sept. 1.—Authorizing Caledon Telephone Co. to erect its wires across C.P.R. tracks at a point 4½ miles east of Caledon station, Ont.

5239 to 5241. Sept. 1.—Authorizing Caledon Telephone Co. to erect its wires across C.P.R. tracks near Caledon station, Ont.

5242 to 5245.—Sept. 1. Authorizing Bell Telephone Co. to erect its wires across G.T.R. tracks at four different points in Ontario.

5246. Sept. 1.—Authorizing the Northern Pipe Line Co. to lay gas pipe or main under G.T.R. tracks, where same cross lot 4, 2nd concession, Raleigh tp., Kent Co., Ont.

5247. Sept. 1.—Authorizing Norfolk County Telephone Co. to erect its wires across G.T.R. track at the intersection of the Centre Town line, at Renton, Ont.

5248. Sept. 1.—Authorizing Bell Telephone Co. to erect aërial wires across C.P.R. tracks at public crossing 100 yds. south of Snelgrove station, Ont.

5249. Sept. 1.—Authorizing Princeton & Drumbo Telephone Co. to erect its wires across G.T.R. tracks at Governor's Road crossing two miles east of Eastwood, Ont.

5250. Sept. 1.—Authorizing Bell Telephone Co. to cross with its wires C.P.R. tracks at public crossing one mile east of Conception station, Que.

5251. Sept. 2.—Authorizing C.P.R. to construct its branch line across certain streets to W. McPherson's premises, Abbotsford, B.C.

5252. Sept. 2.—Authorizing C.P.R. to construct, maintain, and operate a spur to and into W. McPherson's premises, Abbotsford, B.C.

5253. Sept. 2.—Authorizing the Ontario Power Co. of Niagara Falls to erect its wires across P.M. Rd. tracks at Welland, Ont.

5254. Aug. 27.—Authorizing Lakefield Portland Cement Co. to lay water pipe under Montreal Terminal Ry. tracks, three acres east of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5255. Aug. 27.—Authorizing Lakefield Portland Cement Co. to erect its power and telephone lines across Montreal Terminal Ry. tracks, three acres east of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5256. Sept. 2.—Approving location of the C.N.R. through tps. 13, 15, ranges 12, 27, west of the principal meridian, Man.

5257. Sept. 1.—Authorizing Canada Atlantic Ry. Co. to construct, maintain and operate spur to and into W. J. Campbell's premises, Ottawa, Ont.

5258. Sept. 1.—Authorizing Burnt River Telephone Co. to erect its wires across G.T.R. tracks between Graig & Austin's mill and the G.T.R. office, and Crego St., at the corner of Main St., Kinmount village, Ont.

5259. Sept. 1.—Authorizing C.P.R. to construct, maintain and operate spur to and into W. J. Campbell's premises, Ottawa, Ont.

5260. Sept. 1.—Directing the arrival and departure of trains of the G.T.R. at Omemee station, Ont. This order is given in full on another page.

5261. Sept. 2.—Approving C.P.R. Crow's Nest Branch between Peigan and Crow's Nest, Alta.

5262. Sept. 2.—Authorizing the C.P.R. to open for traffic the double track of that portion of its Smith's Falls section between Kemptville Jct. and Mountain, and the second track of that portion of its line from Mountain to Finch, Ont.

5263. Sept. 1.—Authorizing the G.T.R. to cross the Canada Southern Ry. tracks near the G.T.R. south yard at Fort Erie, Ont.

5264. Sept. 1.—Authorizing the Napierville Jct. Ry. to connect its track with the G.T.R. tracks near Lacolle, Que.

5265. Sept. 1.—Authorizing the Hagar Municipal Council to construct a suitable crossing over C.P.R. tracks where the railway intersects road between lots 12 and 13, con. 3, Hagar tp., Ont.

5266. Sept. 17.—Authorizing the National Transcontinental Ry. to cross C.P.R. tracks at grade, at a point near St. Basile station, Portneuf Co., Que.

5267. Sept. 17.—Authorizing G.T.R. to construct, maintain, and operate a branch line or siding from its Lakefield branch on Rabbit St., south of Church St., Lakefield

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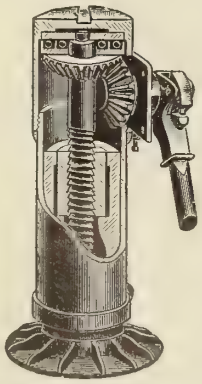
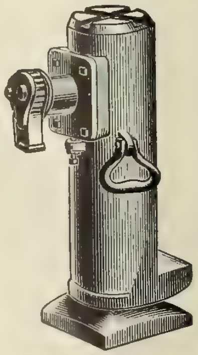
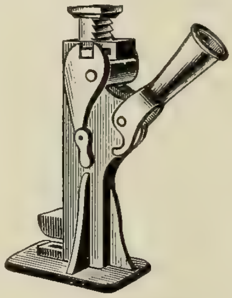
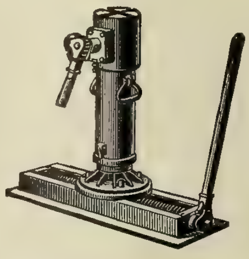
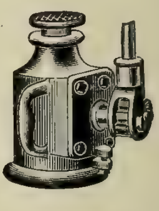

Sectional View


Foot Lift Jack


15 Ton Track Jack


Traversing Jack


Journal Jack

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village, Ont., thence northerly along and across the northern boundary of lot 26 on the east side of Rabbit St.

5268. Sept. 17.—Authorizing G.T.Pacific Ry. to construct its railway across certain highways in Manitoba, from mileage 112.801 to mileage 124.00.

5269. Sept. 3.—Authorizing the British Yukon Ry. to open for traffic that portion of its branch line extending from mile post 106 on its line as now constructed and operated south of White Horse, and thence in a northwesterly direction to the Best Chance mine in the Yukon Territory, a distance of about eight miles.

5270. Aug. 26.—Authorizing Manitoba Public Works Department to construct a highway across the C.P.R. Arcola branch; being an extension southerly of Main St., Arcola, Sask.

5271. Sept. 8.—Authorizing North American Telegraph Co. to erect its wires across G.T.R. tracks, Campbellford, Ont.

5272. Sept. 9.—Authorizing Mills Telephone Co. to erect its wires across C.P.R. tracks at a point east of Thamesford, Ont.

5273. Sept. 9.—Authorizing C.P.R. to operate its trains over the crossing of the Souris Branch by the G.T. Pacific Ry. main line, Headingly, Man., without stopping.

5274, 5275. Sept. 8.—Authorizing North American Telegraph Co. to erect its wires across G.T.R. tracks, at 2 points at Paper Mill Siding, Campbellford, Ont.

5276. May 26.—Authorizing G.T. Pacific Ry. to construct its railway across certain highways in Manitoba, from mileage 84.543 to mileage 112.801.

5277. Aug. 14.—Approving and sanctioning alterations in grade and other changes necessitated by the building and reconstruction of the second track of the 20th District of the G.T.R. line between the eastern limits of Brantford and the western limits of Paris, Ont.

5278, 5279. Sept. 15.—Authorizing the Pipestone municipality, Man., to erect telephone line across C.P.R. tracks at two points west of Reston, Man.

5280. Sept. 15.—Authorizing G.T. Pacific Ry. to transport on construction trains, or by special service if necessary, over that portion of its line from Winnipeg, Man., to Battle River, Alta., prospectors, harvesters, and settlers, with their effects, and to be relieved from liability to penalty for contravening any of the provisions of the Railway Act in that behalf.

5281, 5282. Sept. 15.—Authorizing Pipestone municipality, Man., to erect telephone lines across C.P.R. tracks at two points west of Reston, Man.

5283. Sept. 15.—Authorizing A. A. Grange, Montreal, to lay a water pipe under C.P.R. tracks at Epiphanie, Que.

5284, 5285. Sept. 15.—Authorizing Consumers' Gas Co., Toronto, to lay a 20" gas pipe under G.T.R. tracks on Eastern Avenue, and a 36" gas pipe under G.T.R. tracks at Tecumseh St., Toronto.

5286. Sept. 15.—Authorizing the City of Toronto to lay a 20" water main across G.T.R. and the C.P.R. lands and tracks between the westerly boundary of a road 66 ft. wide and running westerly from Dufferin St., and the easterly boundary of Earnbridge Ave., Toronto.

5287. Sept. 16.—Authorizing Harrietsville Telephone Co. to erect its wires across G.T.R. tracks where same intersect cross road between lots 10 and 11, con. 4, North Dorchester tp., north of the River Thames, about ⅛ mile west of the G.T.R. depot, Dorchester, Ont.

5288. Sept. 16.—Authorizing C.P.R. to construct two additional tracks across Dundan St., south of the existing tracks, and to construct one additional track across the southerly end of Vickers St., on the southerly side of the four tracks already constructed across the said street, Fort William, Ont.

5289. Sept. 16.—Authorizing Guelph and Goderich Ry. to construct a branch line 1,803 ft. long in Milverton, Ont.

5290. Sept. 16.—Authorizing the Sarnia Street Ry. to erect power, trolley, and feeder wires across G.T.R. tracks between Sarnia tunnel station and Point Edward, where they cross Christina St., Sarnia, Ont.

5291. Sept. 15.—Authorizing the Bell Telephone Co. to place its telephone wires under C.P.R. tracks at Notre Dame de Grace road, Montreal.

5292. Sept. 15.—Authorizing Manitoba Government Telephone Commission to erect its wires across C.P.R. tracks ¾ mile west of McDonald station, Man.

5293. Sept. 15.—Authorizing Sidney-Bell Telephone Co. to erect its wires across G.T.R. tracks in Sidney tp., Hastings Co., Ont., about 2 miles west of Belleville station.

5294. Sept. 15.—Authorizing C.P.R. as lessee of the Vancouver and Lulu Island Ry. to construct, maintain, and operate a branch line from a point on the centre line of the Lulu Island branch, at station 68 plus 76, thence in a northerly direction to and into the Vancouver Lumber Co.'s premises, lot 526, Vancouver, B.C., a distance of 1,152 ft.; also another spur commencing from a point on the centre line of the said branch at station 69 plus 52, and extending in a northeasterly direction to and into the said company's premises, to a point on the westerly limit of Bridge St., a distance of 560 ft.

5295. Sept. 15.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.P.R. tracks at Methven, Man.

5296. Sept. 15.—Authorizing G.T.R. to construct, maintain and operate a branch line from a point on its railway west of the Chaudiere Jct., and east of the Chaudiere River, Charny parish, Que., thence in a southeasterly direction through the Charny parish and St. Jean Chrysostome parish to the Chaudiere Lumber Co.'s premises, with two spur tracks running westerly from the southeasterly end of the said branch line.

5297 to 5299. Sept. 16.—Authorizing Consumers' Gas Co. to lay a 20" and 8" gas mains under C.P.R. tracks on Eastern Ave. and Christie St., and a 20" gas main under G.T.R. tracks on Eastern Ave., Toronto.

5300. Sept. 16.—Authorizing Lumsden Radial Telephone Co. to erect its wires across C.N.R. tracks at Lumsden, Sask.

5301, 5302. Sept. 16.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.N.R. tracks at Mariapolis and 2 miles east of Swan Lake, Man.

5303. Sept. 17.—Authorizing the Quebec, Montreal and Southern Ry. to cross with its track at rail level the G.T.R. tracks (Three Rivers Branch) near St. Gregoire station, Que.

5304 to 5308. Sept. 17.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.N.R. tracks 1 mile east of Altamount; 1½ miles northeast of Mariapolis; 2 miles west of Somerset; 3 miles west of Miami; and at Main St., Somerset, Man.

5309. Sept. 17.—Authorizing the C.P.R. to open for traffic that portion of the double track of its main line between Fort William and Winnipeg, extending from Linke to Savanne, mile 59.6 to 71.9; from Carlstadt to Niblock, mileage 89.9 to 97.5; from mileage 106.2, Shiba, to 112.6, English; from mileage 124.7, Tamarac, to Bonheur, all on the Fort William section; and from mileage 38.5 to mileage 15.1, Scoril, on the Ignace section, Ontario.

5310. Sept. 17—Authorizing Consumers' Gas Co. to lay a main under C.N.R. tracks on Eastern Ave., Toronto.

5311. Sept. 17.—Authorizing the Wallace Rural Municipality to erect wires across C.N.R. tracks between sec. 21 and 22, 26, 10, Virden, Man.

5312. Amending order 5269, dated Sept. 3, 1908, by striking out clause 2.

5314. Sept. 17.—Authorizing Lumsden Radial Telephone Co. to erect its wires across C.N.R. tracks on River St., Lumsden, Sask.

5315. Sept. 17.—Approving by-law of the Quebec, Montreal and Southern Ry. authorizing its General Passenger and Freight Agent, D. I. Roberts, to prepare and issue tariffs of tolls to be charged on all traffic carried by the company.

5316. Sept. 17.—Approving by-law of the Wabash Rd., authorizing the Chief of the Tariff Bureau, F. A. Barber, to prepare and issue tariffs of tolls to be charged for all traffic carried by the company.

5317. Sept. 17.—Authorizing the G.T.R. to operate its trains over the crossing of its railway by the C.P.R., near the asylum, London, Ont., without being brought to a stop.

5318. Aug. 26.—Authorizing Hon. M. E. Bernier, Deputy Chief Commissioner, to hear and take evidence in the application of the G.T.R. to take some six or seven pieces of land at St. Hilaire, Que., required in connection with the double-tracking of its line.

5319 to 5323. Sept. 18.—Authorizing the Pipestone municipality, Man., to erect wires across C.N.R. tracks at 5 points in Manitoba.

5324. Sept. 18.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.N.R. tracks near Griswold, Man.

5325. Sept. 18.—Authorizing the Vancouver, Victoria and Eastern Ry and Navigation Co. to construct, maintain and operate a branch line to the Vermillion Forks Mining and Developing Co.'s coal mine, on lot 1822, group 1, Princeton, B.C.

5326. Sept. 18.—Authorizing J. A. Moquin, Eastman, Que., to lay a 1½" water pipe under C.P.R. tracks, lot 1, con. 9th range, Bolton tp., Brome Co., Que.

Railway Track and Track Work.—A new and enlarged edition of the recognized standard work bearing the above title, by E. E. R. Tratman, Associate Member of the American Society of Civil Engineers, has been issued by the Engineering News Publishing Co., 220 Broadway, New York City. This work has been recognized as the standard authority on the subject of track work since the first edition was issued in the autumn of 1897. The present edition is the third and includes some 50 pages more than the second edition, which was issued in 1901. It has been entirely re-written, and there has been added, for the illumination of the text, a large number of new illustrations. The volume not only deals with the general principles underlying track design and maintenance, and the systems of practice which are everywhere applicable, but includes, also, numerous details as to equipment, materials, appliances and methods as used by individual railways in different sections of the country. The treatment of the different subjects is comprehensive, and as thorough as is possible within the limits which the author allows himself, while the method of treatment is clear, concise and critical. To the man in charge of the track work, as well as to the engineering student, the work is invaluable.

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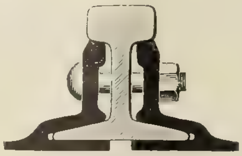

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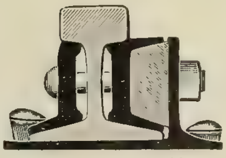

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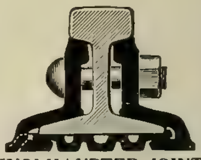

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Canadian vs. U.S. Eastbound Rates.

In replying to the memorial of the U.S. Trans-Atlantic Associated Freight Conference, regarding the grain rates levied by the various railway companies on grain from lake ports to the seaboard, given in our Sept. issue, C. C. McCain, Chairman of the Trunk Lines Association, of which the G.T.R. is a member, says:

"…. Since the conference very full consideration has been given the subject and the views of the railways, together with their conclusions, will here follow, which I am directed to transmit at somewhat greater length than would ordinarily be necessary were it not evident that the publicity which has been given the petition, and the question generally, has laid upon the railways a measure of responsibility for the decline in exports at New York and Boston, as well as an implied indifference to the welfare of the commercial and steamship interests engaged therein. Reviewing the petitions the following statements are observed:

Attention is directed 'to the unreasonable rates demanded by the railways on export grain from lake ports to the seaboard as compared with the rates that are being accepted by the railway companies from the lake ports to Montreal.'

The present situation is a deplorable one, for which the railways are responsible, and is killing the steamship business from the four ports named.

Montreal is not only loading its regular tonnage, but the favorable grain rates from that port are attracting tramp steamers in addition to the regular lines.

Comparison is presented of the rate of 5½c. from Buffalo to New York versus the rate from Georgian Bay ports to Montreal of 3½c., which condition, it is stated, has benefited Montreal and deprived U.S. ports of practically any grain during the corresponding period; it is noticed that no reference is made to the low rates of the all-water routes from Chicago, Duluth, and Fort William to Montreal. In other respects it is felt that these statements do not accurately present the competitive conditions and are unjust in their intimations of apathy and implied neglect on the part of the railways to afford all reasonable protection to the export business of the ports which they serve. Exception must be taken to these assertions, as they wholly misrepresent the position of the railways upon a matter which is manifestly quite as important to them as to the steamship interests. The facts are that the situation at Montreal since the opening of the present season of navigation has had constant attention and been repeatedly considered, with a view to determining what appropriate action might be taken and what changes in rates could be consistently made in order to retain to the U.S. routes and ports their equitable share of the traffic in question.

It is proper to state for your information, that when considering a proposed revision of rates on important traffic, attention must be given to the established rate relations as between various points in order that intended changes will not disturb the usual parity in rates as between such points. It is a fundamental principle in rate construction that certain different relations in charges between localities commercially competitive, as well as between charges on analogous or dependent articles, shall be maintained. Under this principle grain exercises a more extended influence than any other one - commodity transported. The rate on grain from Buffalo to New York is applied as a basis for rates to other Atlantic ports and prescribes the rates from other lake ports. A certain parity must be observed as between domestic and export rates. The rate from the lake ports employed in connection with the water rates from Chicago, Duluth, etc., produces a through charge from the latter points which govern the rates which may be charged by the all-rail routes from Chicago. The latter in turn, is applied as a basis for rates from the Mississippi River, St. Louis and points throughout Illinois, Indiana and Ohio to the Atlantic seaboard. It will, therefore, appear that any material reduction in the rates at and east of Buffalo on export grain would, at once, create new rail-and-water rates from Chicago and enforce a revision in the rate of the all-rail routes from the territory indicated. If such changes were made with respect to export grain, the rates on domestic grain may become involved and require adjustment in order to retain the normal parity.

The relation as between the rates on grain and dependent commodities must also receive attention. Established custom, as well as certain legal requirements, makes necessary the observance of definite relations as between the rates on grain and grain products. The rates on flour from Buffalo, St. Louis, Chicago and Minneapolis are arranged with regard to the grain rates therefrom. Rates on cereals from Ohio and Indiana points are dependent upon the grain and grain products rates from Chicago. Minneapolis and other north-western milling points find their flour rates to the seaboard based upon the flour rates from Chicago and Duluth, each of the latter being established with regard to the grain rate from Chicago. The foregoing is a brief recital of the ramifications of the grain rate structure and its influences, with most of which your interests are no doubt quite familiar. All may be summarized by the statement that a material change in the rates on export grain from Buffalo to New York will necessitate reductions in the rates on all export shipments of grain, flour and other articles which are governed by these rates, and such changes would affect the extended territory indicated herein throughout which this traffic originates. The rates on domestic traffic would be similarly involved. Formerly the at and east export grain rates from Buffalo were from time to time changed independently of other rates. The necessity of observance of regulative requirements and the prevention of possible discriminatory conditions with respect to the relation in charges as between various localities, as well as between competitive commodities, renders necessary a closer adherence to the application of the principles of rate construction described herein.

The competition of the Montreal routes as ascertained and understood by the railways is as follows: Under normal conditions the rates from Georgian Bay ports to Montreal on export traffic bear a specified relation to the rates charged from Buffalo to the Atlantic ports. These, combined with the charges for lake transportation from Chicago, Duluth, etc., produce certain through rates to Montreal and New York, which approximate a recognized relation in the through rates to those ports. This season these normal conditions have been disturbed by the low rates charged by the all-water routes operating from Chicago, Duluth and Fort William to Montreal. This service has been greatly increased, competition has been keen, and the rates have been demoralized. The charge of 3½c. a bushel from western lake ports to Montreal is quite out of proportion to the rates these carriers would receive when engaged in the service from Chicago, Duluth, or Fort William to the Georgian Bay ports, and about half the rate which ordinarily prevails for the through water and rail service from Chicago via the Georgian Bay ports to Montreal. The general depression in lake traffic has diverted independently operated lake vessels from their customary service between upper lake ports to the longer routes to points of trans-shipment on the St. Lawrence or to Montreal direct. With the expected increased fall movement of grain, many of these vessels will find it more profitable to confine their service to and from Chicago, Duluth, and Fort William and Georgian Bay ports.

The rail lines operating from Georgian Bay ports to Montreal have not shared in the business since the introduction of low all-water rates. They are suffering from this competition, as well as competition on westbound traffic, which is being carried by the water routes in greater quantities than heretofore and at exceedingly low rates. Both kinds of competition are seriously felt by the U.S. routes. The lake and rail routes via Georgian Bay ports having been obliged to retire from the grain business, are arranging their rates in anticipation of an increased movement of the new crop, and have announced that, effective Aug. 28, their rates on wheat will be 5½c. a bushel from Georgian Bay ports to Montreal. It is ascertained that there is no increase in the regular ocean fleet operating from Montreal because of this increased movement of grain to be exported, the usual fleet carrying all the grain offering and at lower charges than were in effect at the same time last year. There have been two or three sailings from Montreal by tramp vessels, but this is not regarded as unusual. The tonnage of wheat exported for May, June and July, 1907 and 1908, from the various ports is as follows:

	1907 Bush.	1908 Bush.
New York	5,843,244	3,248,035
Philadelphia	1,590,086	2,557,225
Baltimore	412,000	2,486,799
Boston	562,186	434,207
	8,407,516	8,726,266
Montreal	7,767,045	10,891,303
Total	16,174,561	19,617,569

The foregoing shows that the increase of exports via Montreal was equivalent to the total increase. It is also noted that the U.S. ports, as a whole, have not lost traffic—the decline at New York and Boston being more than equalled by the increases at Philadelphia and Baltimore.

The direct matters to be determined by the railways in this connection are as follows: Shall they reduce their present reasonable and lawfully related rates on export grain to meet the competition of all-water routes to Montreal, which are uncontrolled by any regulative authority, at liberty to charge what they please, and prepare to carry grain traffic at little or no profit, in order to secure return cargoes which offer some slight margin of profit? Would a reduction in such rates under all the circumstances divert a substantial quantity of traffic to the Lake Erie gateways? Is a reduction justified in view of the influence of the export grain rate upon the rates of other important traffic? As a result of the very thorough consideration which has been given the entire matter, the interested railways do not find that the conditions justify a reduction in the export grain rates at this time. The principal controlling reasons leading to this conclusion may be stated as follows: A reduction in the rates east of Buffalo necessary to equalize the rates of the competitive all-water routes leading to Montreal would result in rates wholly unremunerative. The railways are without evidence or assurance that a reduction to the extent proposed will result in an increased movement through the Lake Erie gateways. That such a reduction would not add to the volume of this traffic is in accordance with the views of representatives of the New York Produce Exchange, expressed at a recent conference with the officers of the railroads, when it was stated that no assurance in this connection could be given, but it was assumed that somewhat lower rates, together with the more convenient business facilities at New York, would, no doubt, result in an increased tonnage through that port. The effect of the proposed reduction upon other rates and traffic, as indicated above, would result in

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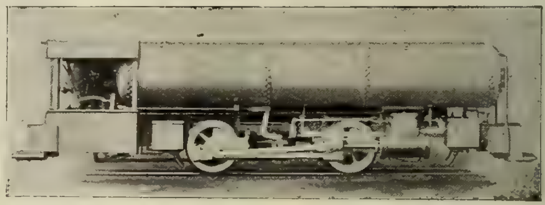

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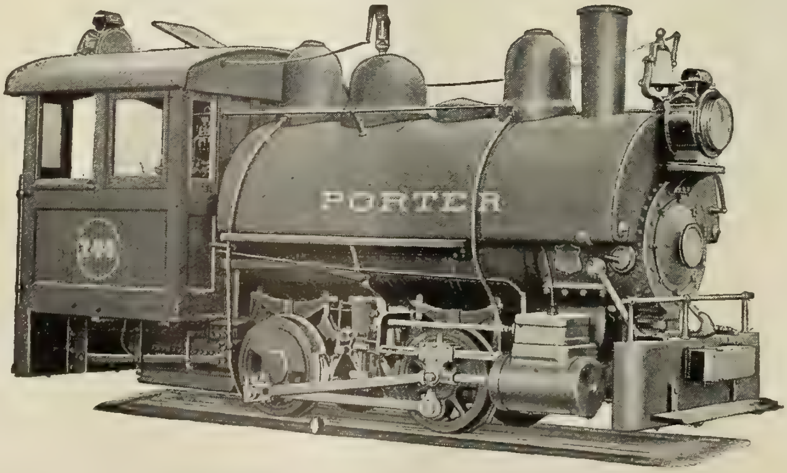

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serious loss of revenue, which could not be regained by any probable increase in export grain shipments. The conditions under which the increased movement to Montreal has taken place are regarded as abnormal and temporary, and it is believed the normal status will be resumed with the beginning of the movement of the new grain crop, when shipments by lake will be more distributed between the various lake ports and less concentrated on Montreal, and the U.S. Atlantic ports will again receive their customary quota.

The present ocean rates may be regarded as low as could be reasonably made, yet, it is observed that the rates from Montreal are lower than last year, while advances have been made from New York to foreign ports not served from Montreal. A lower inland rate to New York would afford opportunity for further advances to such points and this suggests, as has been noticed in the past, that reduced inland rates and slightly increased tonnage offerings are conducive to higher ocean rates. It would, therefore, appear that the reduction now desired is expected to be borne entirely by the railways, permitting them to be the sole benefactors in relief of the conditions complained of. The railways cannot refrain from observing that the petitions have evidently, and very naturally, had origin in the thought of self-preservation and quite overlooked the consequences to the railways, and did not emanate from the broader view of co-operative action for the joint interest of the ocean lines, railways and the U.S. ports. This leads to a further and more general observation suggested by the proposition, as well as other constantly increasing demands upon the transportation interests. There is a widespread matter-of-course belief that there are no business ailments which are not in some manner attributable to the practices or charges of the railways and they, therefore, must furnish the remedy. This, in the majority of instances, they ultimately do, either from a semi-compulsory business expediency or as a result of being haled before commission or court—the facilities for such procedure being now most convenient and inexpensive. No corresponding tribunal is available to the carriers for relief from any affliction which may befall them. They are confronted with innumerable demands for cheaper transportation, and encumbered with an enormous expense to meet the regulative requirements of the various laws and commissions. These, and other newly imposed expenses, together with the great increase in cost of direct operation, have brought upon these interests an exceedingly burdensome situation.

Under existing conditions the railways feel that they must approach any proposition looking to a reduction in rates with the greatest deliberation. It has been their experience in recent years where rates were reduced to meet commercial or other emergencies, and were thereby made lower than an amount which could have been justified as reasonable, that such lower figure has come to be regarded by the shipping public as the measure of remunerative charge, and has similarly influenced the minds of regulative bodies, and it has been with the greatest difficulty that they were advanced to the former higher and entirely reasonable amount. In fact there are many instances where low rates brought about by the conditions indicated are still in effect. The railways must, therefore, proceed cautiously with these questions if they are to secure earnings commensurate with improved service and increased cost of operation.

These views are stated in order to apprise your interest of the conditions that at present confront the management of the railways, but should in no measure be assumed to indicate an indifference on their part to cooperate to the fullest extent with the commercial and steamship interests in any reasonable undertaking which the exigencies of business may demand, looking to the preservation of the export traffic to the U.S. ports, provided this can be accomplished without impairment of existing necessary rate adjust-revenue.”

Great Northern Ry. Lines in Canada.

A railway is projected under Great Northern Ry. auspices from Browning, Mont., to the International boundary, and thence to Pincher Creek, Alta., under one of the charters in Alberta owned by G.N.R. interests. Local reports state that construction is to be started in the spring, the route to be through the South Peigan Indians' reserve, which the U.S. Government is about to throw open for settlement.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—The company's new line from Cloverdale, B.C., to Blaine, Wash., and the branch from Cloverdale to Huntingdon are reported to be completed. With the completion of the Cloverdale-Blaine line the old line from New Westminster to Blaine. —New Westminster Southern Ry.—is to be abandoned by the company, and it is reported that it is to be transferred to the British Columbia Ry. for electrification. In May last we were advised that the B.C. Electric Ry. Co. had no intention of acquiring this line.

Plans have been approved for the proposed terminals at Vancouver. The work projected includes the construction of wharves on Burrard Inlet at a cost of about $500,000. (Aug., pg. 565).

Accuracy Respecting Appointments.

The inaccuracy of information in regard to railway matters published by a great portion of the daily press is proverbial, and even some technical papers are very often not more careful. The following reproductions from a Toronto technical paper are typical examples:

> "Mr. H. H. Brewer has been appointed to the position of general superintendent of the C.P.R. at Winnipeg, Man.
>
> "Mr. W. G. Brownlee, General Superintendent of Transportation for the Grand Trunk Railway, has been Pacific Railway. Mr. Brownlee's new headquarters will be at Winnipeg."

In regard to the first paragraph above quoted, it may be mentioned that H. H. Brewer has been appointed General Superintendent of the Grand Trunk Pacific Ry., as announced in our September issue, not of the C.P.R.

The second paragraph is quoted verbatim as published by our contemporary, which evidently omitted something. W. G. Brownlee is not General Superintendent of Transportation of the G.T.R. He is General Transportation Manager. Towards the end of August press despatches said he had been appointed Assistant General Manager of the G.T. Pacific Ry. with headquarters at Winnipeg, and that he would be succeeded on the G.T.R. by L. J. Ferritor, at present in the Wabash Rd. service. Having no official advice of such changes, we made enquiries, which failed to confirm the reports, consequently we did not publish them.

The moral is that those who want to keep posted on railway appointments, as well as other transportation matters, should depend on the Railway and Marine World, on the accuracy and fullness of the information contained in which we are continually in receipt of appreciative testimony.

We go to a great deal of trouble and spend much time in verifying information before publishing, and are amply repaid for this by the dependence our readers place on the matter we provide for them.

C. P. R. Betterments, Construction, Etc.

Guelph and Goderich Ry.—It is reported in Stratford, Ont., that the C.P.R. has abandoned its projected route along the north side of Victoria Lake in that city, for the line to connect the G. and G. Ry., and the St. Mary's and Western Ontario Ry. The plans for the route have been approved by the Board of Railway Commissioners, and it is said that application will be made for the cancellation of the plans so that owners can proceed with the improvement of their properties.

St. Mary's and Western Ontario Ry.—The plans showing the proposed location of a spur line from the main line at the road allowance between concessions 17 and 18, Blanchard tp., to another point in that township, both points being within the town of St. Mary's, Ont., have been deposited in the Registry Office at St. Mary's. Application will be made, Oct. 3, to the Board of Railway Commissioners for permission to construct the line.

The Ontario Railway and Municipal Board issued an order, Sept. 9, validating the by-law passed by the St. Mary's Town Council to raise $40,000 by debentures to be paid to the St. M. and W.O.R. by way of loan.

Lake Superior Division.—Traffic on the transcontinental line was suspended for several days by the burning of the 600-ft. trestle bridge near Hemlo, between White River and Schreiber, Ont., Sept. 3.

Manitoba and Northwestern Ry.—Grading operations are being carried on from Arden, Man., westerly for the purpose of improving the roadbed.

Regina Northerly.—Plans have been filed at Saskatoon, Sask., showing the revised location of this projected line for 25 miles from Saskatoon. The route as shown by the plans is from Regina northwesterly on the west side of Lost Mountain Lake, and about midway between that lake and Regina-Prince Albert branch of the Canadian Northern Ry., as far as Saskatoon. At that point the C.N.R. is closed and the new line parallels it to Prince Albert.

Bulyea Branch.—Plans have been filed at Saskatoon, Sask., showing the location of the branch line projected from Bulyea, on the company's Kirkella branch, to a junction with the projected Regina-Prince Albert line.

Weyburn-Stoughton Line.—Tracklaying was resumed, Sept. 4, on the line to connect Weyburn and Stoughton, Sask., and was expected to be completed by the end of the month. The completion of this line will give a connection between the line from Portal, connecting the Minneapolis, St. Paul and Sault Ste. Marie Ry. with Moose Jaw, and the company's Brandon-Regina line.

Moose Jaw-Lacombe Line.—A train service was put in operation, Sept. 14, on the first section of this line. The section of the line completed is from Moose Jaw to Tugaske, about 56 miles. The stations on the new line are Bellreck, Tuxford, Marquis, Keeler, Brownlee, Eyebrow, Tugaske. Track has been laid for a short distance further to Benson's pit.

Royal Collieries Spur.—A spur line is under construction from the C.P.R. at Lethbridge, Alta., northerly to the Royal collieries, 5.50 miles. It is expected that the line will be completed by Oct. 15

Crow's Nest Pass Diversion.—Satisfactory progress is being made upon the grading for the cut-off on the Crow's Nest Pass branch in the vicinity of Macleod, Alta. The construction of the cut-off will reduce the distance between Lethbridge and Macleod by about five miles, and will give a gradient of not exceeding 1% against gradients running up to 5% on the present line. The deepest

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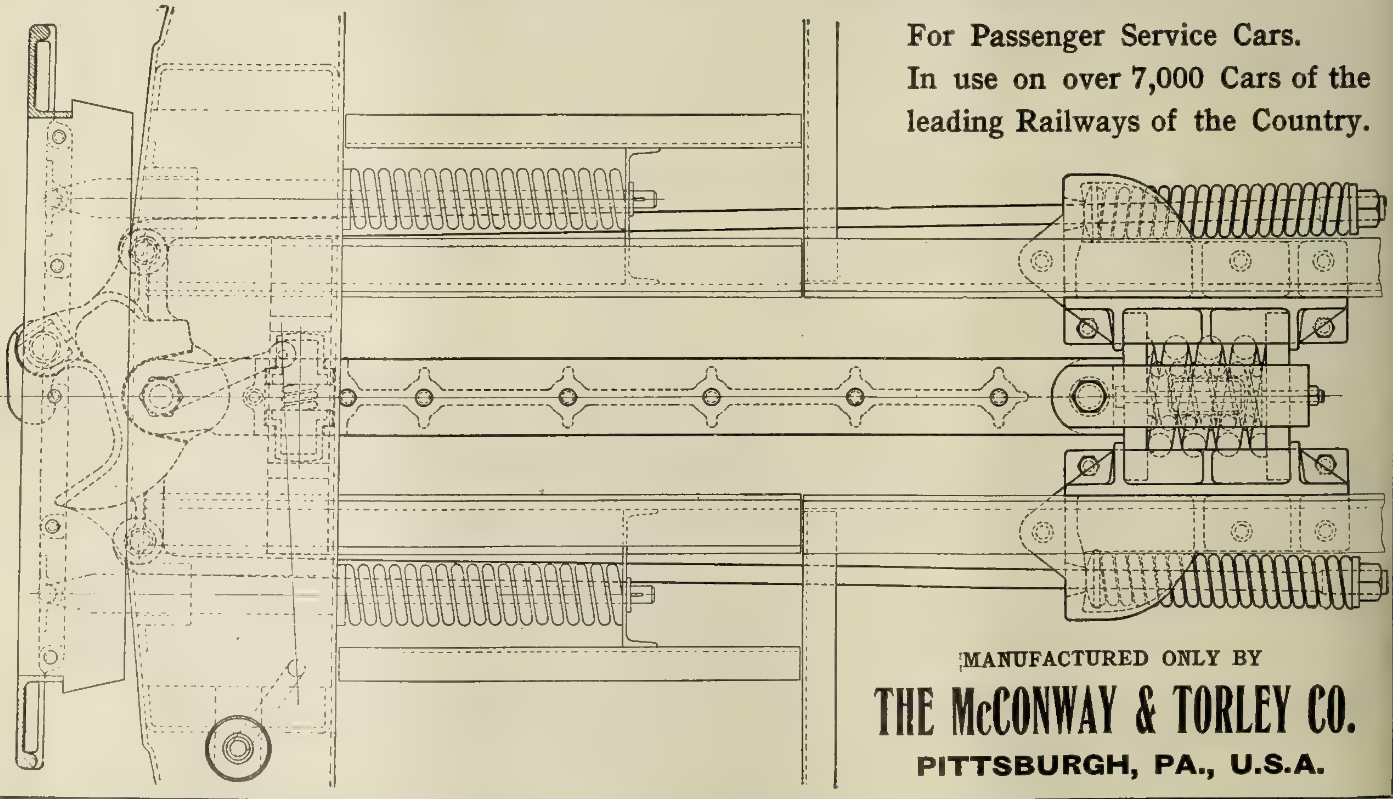

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cut on the new line is 29 ft., and at the Old Man River there is a fall of 50 ft. The contractors expect to have the grading completed and ready for tracklaying by the end of the year.

Edmonton Northerly.—Two C.P.R. survey parties have been working between Edmonton and the Peace River during the summer. One party, under —. Hyslop, worked through the Grand Prairie country towards Pine Pass and the other, under W. Pearce, worked through the Lesser Slave Lake country to the Peace River. The latter party returned to Edmonton Sept 9, having, it is understood, completed its field work.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Press reports state that surveys are being made for the construction of a line from Thief River Falls, Minn., via Killarney, and Cartwright, Man., to Brandon. (Sept., pg. 625).

Railway Rolling Stock Notes.

The Canadian Northern Ry. has ordered 2 snow-plows from the Crossen Car Mfg. Co., Cobourg, Ont.

The T. and N.O. Ry. has received two 60-ft. mail and express cars from the Preston Car and Coach Co., Preston, Ont.

The Corbett-Floesch Co., Moncton, N.B., has received one Rodger double plow distributing car from the Hart-Otis Car Co., Montreal.

The Canada Foundry Co., Toronto, between July 14 and Sept. 14, delivered 10 eight-wheeled locomotives to the G.T. Pacific Ry.

The Moncton and Buctouche Ry. has recently added 8 flat cars to its equipment. The trucks were bought from the I.C.R. and the platforms built at Buctouche, N.B.

Rhodes, Curry & Co., Ltd., Amherst, N.S., between Aug. 1 and Sept. 15 delivered 300 box cars and 6 baggage cars to the G.T. Pacific Ry., and received an order for 12 baggage cars.

The G.T.R., between May 1 and Aug. 31, received the following additions to rolling stock, apart from locomotives, details of which we have already published: 2 dining cars, 3 mail cars, and 25 first-class cars, all but the last-mentioned being built at the G.T.R. shops, Point St. Charles.

The C.P.R., between July 21 and Sept. 20, received the following additions to rolling stock: 1,032 box cars, 13 baggage cars, 9 sleeping cars, 2 colonist cars, 3 Pacific type locomotives from its Angus, Montreal, shops; 4 vans from its Farnham, Que., shops, and 5 locomotives from the Montreal Locomotive Works.

The C.P.R., between July 21 and Sept. 20, ordered the following rolling stock: 186 box cars, 25 stock cars, 52 flat cars, 3 freight refrigerator cars, 2 wing snow-plows, 2 flangers, 1 steel coal car, 1 tourist car, from its Angus, Montreal, shops; 5 vans from its Farnham, Que., shops; 2 steel ore cars, 3 Hart-Otis ballast cars, from the Dominion Car and Foundry Co., Montreal.

The names chosen for the sleeping cars are England, Ireland, Scotland, Newfoundland, New Zealand, Queensland. Further orders have been placed for 12 baggage cars, nos. 412 to 423; 5 colonist cars, nos 3,000 to 3,004; 5 tourist cars, nos. 3,400 to 3,404; and orders for next year's delivery consist of 2,900 freight cars and 50 passenger cars, in addition to those already quoted above.

The Intercolonial Ry., between July 14 and Aug. 29, received the following additions to rolling stock: 50 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.; 93 box cars, 80,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S., and 53 other box cars, 60,000 lbs. capacity; also 8 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.; and since Aug. 29, the Canadian Locomotive Co. has delivered 4 more consolidation locomotives.

The Canadian Northern Ry., between July 15 and Sept. 15, received the following additions to rolling stock: 150 box cars from Rhodes, Curry & Co., Amherst, N.S.; 5 passenger coaches, 12 cabooses, and 10 refrigerator cars from the Crossen Car Mfg. Co., Cobourg, Ont.; one consolidation locomotive from the Canadian Locomotive Co., Kingston, Ont.; 4 consolidation locomotives and 6 ten-wheeled locomotives from the Montreal Locomotive Works, and one consolidation locomotive from the Canada Foundry Co., Toronto.

With further reference to G.T. Pacific Ry. rolling stock, a list of orders for which we gave in our Sept. issue, following is a tabulated list of the orders placed, the numbers given to each class, quantities ordered, and quantities received up to Sept. 11:

Description.	Numbers.	Nos. Ord'rd	Nos. Rec'ed
Mail and express coaches.	100 to 105	6	—
Baggage cars.	400 to 411	12	6
2nd-class smoking and bag'ge coach's	850 to 867	18	16
2nd-class coaches. .	1,000 to 1,009	10	10
1st-class coaches. . .	2,000 to 2,017	18	10
Sleeping cars.	. . . .	6	6
Box cars.	300,000 to 307,424	7,425	6,330
Flat cars.	360,000 to 360,999	1,000	1,000
Ballast cars.	392,000 to 392,044	45	45
Mogul passenger locomotives.	51 to 100	50	40
Construction locomotives	1 to 26 300 and 500 to 509	37	37
Steam shovels.	395,900 to 395,909	10	10
Miscellaneous cars.	. . . .	659	659

G.T.R. Betterments, Construction, Etc.

Ottawa Terminal Ry.—It is expected that the demolition of the old station buildings at Ottawa will be completed, and the baggage room, which is to be used as a temporary station, erected by the end of the year. Excavation operations are to be resumed early in Oct. It is expected that tenders will be asked for very shortly, the plans having been completed.

Cobourg Improvements.—E. H. Fitzhugh, Third Vice-President, accompanied by other officers, was in Cobourg, Ont., Sept. 16, looking over the improvements being carried out in connection with the car ferry docks. Good progress has been made during the summer with the dredging both outside and inside the harbor. A channel about 200 ft. wide has been dug and the dredge will continue work so long as the weather will permit. The work of fixing the breakwater and slip is to be undertaken at once. In the spring the extension of the piers will be taken in hand by the contractors, the Randolph Macdonald Co.

Omemee Station.—The Board of Railway Commissioners has made an order directing the G.T.R. to establish a station at Omemee, Ont., in accordance with an agreement made between the company and the town when the line was constructed.

Toronto Union Station.—The arbitration proceedings in connection with the Eckardt property, expropriated in connection with the projected new union station, have been completed. The award was taken by the Eckardt Co. to the Court of Appeal, but finally an agreement was reached by which the appeals were withdrawn, and the majority award of $16,000 was accepted.

Middle Division Improvements.—The new station at Walkerville, Ont., is nearly completed. On the line between Guelph and Palmerston, Ont., it is proposed to rebuild and reinforce the present bridges, to strengthen them so as to permit the use of heavier locomotives. It is also proposed to raise the track between the north side of the London bridge, St. Mary's, Ont., and the freight yards south of the old G.T.R. town site, thus cutting out a heavy gradient.

Port Huron Shops.—The city council of Port Huron, Mich., has granted the company a portion of Riverview St. for shop purposes. Master Car Builder Hodgson told the council that he was instructed to have erected a wood mill, 117 by 78 ft., and to add new machinery in the other shops. The additional space given by the portion of the street taken in will be used for lumber storage. (Sept., pg. 631.)

Telephone Dispatching on the C.P.R.

A trial telephone dispatching circuit was equipped on the C.P.R. between Montreal and Farnham, Que., 44 miles, and put into operation on June 23, since which time no dispatching has been done by telegraph between those points with the exception of two occasions when some of the instruments were injured by lightning. Special hard-drawn copper wires, weighing 210 lbs. a mile, were strung between Montreal and Montreal Jct.; these wires are transposed every quarter of a mile; from Montreal Jct. to Farnham, every half mile. The circuit is now being extended from Farnham to Newport, Vt., 64 miles further. It is the intention to transpose every half mile between Farnham and Newport, with the exception of a few miles where a high tension power line is paralleled. Along this portion the wires will be transposed every quarter of a mile. The double transposition insulator is not used, the two wires being usually strung on the end pins of two cross-arms, one wire above the other. Where transposition takes place an extra pin is inserted in the upper arm to carry the wire that would otherwise be on the bottom arm; the upper wire then drops to the bottom arm on the next pole. By following this method there is no part of the line where the two wires are nearer each other than seven inches and we avoid leakage across from wet weather, wet snow, etc., and also liability of crosses resulting from a transposition insulator being broken. The transposition insulator being larger than the remainder on the same pole, the small boy and others are likely to use it as an objective when throwing stones.

The telephone system has been found very satisfactory and, as above stated, the circuit is being extended from Farnham to Newport. Estimates have been prepared for two other circuits on western lines, where it will probably be introduced next year. It was at first presumed that while the telephone would likely be found very advantageous in working double track, it would not be nearly so good for single track service, but actual experience has shown that the advantages of the telephone over the telegraph are far greater for single track work than for double track.

Not only is there a very great saving of time in handling traffic, but there are many additional advantages—for instance—the dispatcher is able to call the conductor or engineer to the telephone at any station and converse with him directly about any difficulty that may have arisen. He can also get far more definite information in a much shorter time from the operators or agents regarding any matter connected with the dispatcher's department. In addition to these advantages each train can be equipped with an instrument and a jointed pole by which, in case of a train being stalled between stations, the conductor can in one or two minutes get into direct communication with the dispatcher. The trains on the Montreal-Farnham section have not yet been equipped, but they probably will be in the near future.

We are indebted to W. J. Camp, C.P.R. Electrical Engineer, for the foregoing information.

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Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta North-Western Ry.—The Alberta Legislature has incorporated a company with this title to construct a railway from Edmonton to the provincial boundary at Peace River, touching Athabasca Landing, Lesser Slave Lake, Peace River Crossing, Dunvegan, or some one of them, and from Edmonton to Medicine Hat, thence southerly to the International boundary. The company's offices are at Edmonton; its capital is fixed at $500,000; it may issue bonds to the extent of $15,000 a mile, and enter into agreements of various kinds with other railway companies. The provisional directors are: D. MacArthur, Reaburn, Man.; E. F. Getchell, Chicago, Ill.; F. G. Foster, Medicine Hat, Alta.; N. D. Beck, E. G. Emery, Edmonton, Alta. (Mar., pg. 179.)

Alberta Oil, Coal and Wheat Ry.—In 1906 the Alberta Legislature incorporated a company with this title, to construct a railway from near Oil Creek, near the eastern boundary of British Columbia, along the valley of the creek to the Waterton Lakes, thence to the village of Pincher Creek, and then to the C.P.R. Crow's Nest Pass Line, near Pincher station, with branch lines not exceeding in any one case 40 miles in length. The capital of the company is fixed at $1,000,000, and bonds to the extent of $15,000 a mile of line constructed may be issued. Telephone and telegraph lines may be constructed, and the company is authorized to develop electrical power and utilize the same for its railway if desirable. The head office is at Pincher Creek, and the provisional directors are: J. E. Woods, T. Lebel, H. E. Hyde, J. H. Schofield, W. R. Dobbie, E. J. Mitchell, A. C. Kemmis, Pincher Creek, and J. J. Hentot, Trout, Alta. (Feb., pg. 97.)

Alberta Railways.—A project is being agitated in Alberta for the construction by the Provincial Government of a railway from the International boundary, northerly, at a distance of from 30 to 40 miles east of the Calgary and Edmonton Ry., to the Peace River country. The line, it is proposed, should be operated by the Government.

Alberta Southern Ry.—The Alberta Legislature has incorporated a company with this title to construct a railway from Lethbridge, through the Crow's Nest Pass to the boundary of British Columbia; from Lethbridge to Calgary, and from Macleod to a point on the Lethbridge-Calgary line, and thence easterly to Medicine Hat, with branch lines. The offices are to be at Calgary; its capital is fixed at $500,000; it may issue bonds to the extent of $15,000 a mile of line constructed, and may enter into agreements of various kinds with other railway companies. The provisional directors are: I. S. G. VanWart, R. J. Hutchings, A. M. Grogan, Calgary.

Alsek and Yukon Ry.—The railway which this company has been given power to construct by the Dominion Parliament will extend from the International boundary near Pleasant Camp, B.C., where the Klihini River crosses, north easterly along the Klihini, Tatsenshini, Shakwak and Alsek River valleys; northwesterly along the shores of Kluane Lake, and the Donjek and White River valleys, to the International boundary between the Yukon Territory and Alaska, between the 62nd and the 64th parallels of latitude. The provisional directors are: G. A. McDougal, J. P. Smith; Dawson, Yukon; F. Joslin, Fairbanks, Alaska; C. E. Winn-Johnson, B. L. Allan, New York City. (Feb., 1907, pg. 87.)

Calgary and Knee Hill Ry.—A company with this title was incorporated by the Alberta Legislature in 1907, to construct a railway from Calgary northerly through tps. 24 and 25 in range one, west of the fifth meridian, then northerly and easterly through tps. 26, 27 and 28 in ranges 28, 27, 26, 25 and 24, west of the fourth meridian, to or near tp. 29, range 23, west of the fourth meridian on Kneehill's Creek. The capital is fixed at $1,000,000, and the company is authorized to issue bonds to the extent of $20,000 a mile. It may enter into agreements for selling, leasing or operating its line with other companies, and may also construct telephone and telegraph lines. The offices are at Edmonton, and the provisional directors are: F. Aylwin, Ottawa; P. Roy, J. E. Laurencelle, Edmonton, Alta.

Chicago, Milwaukee and St. Paul Rd.—Reports from Winnipeg state that this company has secured options on a large area of property there for use as a terminal station and yards. The company is negotiating for running rights over the Duluth, Rainy Lake and Winnipeg Ry. to Fort Frances, Ont., and over the Canadian Northern Ry. between Fort Frances and Winnipeg, and if these rights are secured, it is claimed the company will be able to give a route between Chicago and Winnipeg 40 miles shorter than any existing line.

Collingwood Southern Ry.—The railway which this company has been authorized by the Dominion Parliament to construct, will extend from Collingwood, Ont., to near Baxter, on the Toronto-Sudbury branch of the C.P.R., and from near Collingwood to or near Orillia, joining the C.P.R. line there. At present the C.P.R. has no line passing through Orillia, but there is projected the Georgian Bay and Seaboard Ry., of which the C.P.R. has already constructed a section between Coldwater on the Toronto-Sudbury branch and Victoria Harbor. The provisional directors are: F. W. Bryan, H. Y. Telfer, F. W. Churchill, Collingwood, and L. A. Hamilton, Toronto. F. W. Churchill is C.P.R. ticket agent at Collingwood, and L. A. Hamilton was formerly C.P.R. Land Commissioner. (Mar., 1907, pg. 159.)

Detroit River Tunnel.—Five of the ten double tubes of the tunnel between Detroit, Mich., and Windsor, Ont., have been laid, completing one-half of the work. It is expected that two more sections of the double-tube will be placed in position before work is suspended for the year, and that the river portion of the tunnel will be completed by June, 1909. The work on the shore approaches is being rapidly pushed forward. (July, pg. 471.)

The Diamond Ry. Co., Limited, has been incorporated by the Alberta Legislature to construct a railway from the collieries in tp. 10, range 21, west of the fourth meridian, westerly to join the proposed revision of the C.P.R. Crow's Nest Pass line, in or near tp. 9 or 10, in ranges 32, 23 or 24 west of the fourth meridian. The capital is fixed at $60,000, and the company is empowered to issue bonds to the extent of $15,000 a mile. It is authorized to enter into agreements for the sale, lease or operation of its railways or mines with other companies. The provisional directors are: C. W. Clarke, G. F. Stephens, Winnipeg, and T. Underwood, Calgary, Alta., and the company's offices are at Calgary, Alta. (See Diamond Coal Co., Feb., 1907, pg. 87.)

Eastern British Columbia Ry.—The Corbin Coal and Coke Co. has been incorporated in Spokane, Wash., with a capital of $1,000,000, for the purpose of developing an area of 10,880 acres of coal lands in the Crow's Nest Pass district of British Columbia. The articles of association state that the objects of the company are not only to engage in coal mining, but to transact all kinds of business, including the construction and operation of railways, dealing in lumber, developing water and electrical powers, and in fact any enterprise which it might be desired to engage in at any time in the future. It is also proposed to apply to the Provincial Legislature, or the Dominion Parliament, or both, for acts to enable the company to carry out any of its objects, and to oppose any proceedings which may seem calculated, directly or indirectly, to prejudice the company's interests. The incorporators, who are also trustees for the company, are: D. C. Corbin, A. Corbin, A. H. Sperry, A. Wardner, Ida Roberts, G. R. Martin, Spokane, Wash.; J. K. O. Sherwood, New York City. (Sept., pg. 615.)

The Edmonton and Athabasca Ry. Co. was incorporated by the Alberta Legislature in 1907 to construct a railway from Edmonton along the north bank of the North Saskatchewan River to Lac la Biche, thence to Fort Chipewyan, on Lake Athabasca, with branches southwards from Clearwater to Fort McMurray, and the Grand Rapids of the Athabasca River. The company's offices are at Edmonton; its capital is $500,000; it has power to issue bonds to the extent of $15,000 a mile of line constructed, and may enter into agreements with other companies for various purposes. The provisional directors are: J. M. Robinson, Summerland, B.C.; T. J. Smith, Vancouver, B.C.; J. Bennette, T. R. Webb, and J. T. Huggard, Winnipeg, Man. (See Edmonton to Fort McMurray, Aug., 1907, pg. 577.)

Erie, Tillsonburg and London Ry.—J. L. Thomas, C.E., London, Ont., stated Sept. 6, that an early start would be made upon the construction of this projected railway The route, as surveyed, is from Port Burwell, on Lake Erie, through Aylmer and Belmont, to London, a distance of 35 miles. The steepest gradients on the line will be on the first eight miles from Port Burwell; the remaining distance will be practically level. The estimated cost of the line is over $1,000,000. (Sept., pg. 615.)

Ha Ha Bay Ry.—The development of a deep water harbor, available for ocean-going, steamers, at the head of the Saguenay River, has been looked forward to for years. When the Quebec and Lake St. John Ry. was extended to Chicoutimi, it was thought that a harbor might be developed there. A considerable amount of dredging was done, but it has been found impossible to secure a sufficient depth of water and suitable approaches. The Quebec Legislature passed an act authorizing the construction of a railway from Jonquieres, on the Q. and L. St. J. Ry., to St. Alphonse, on Ha Ha Bay, and subsidies in aid of its construction have been voted by the Provincial Legislature and by the Dominion Parliament. The promoters of the railway include J. G. Scott, J. E. A. Dubee and B. A. Scott, who were associated with the construction of the Q. and L. St. J. Ry., and the development of the industries in the Lake St. John country. Proposals for the construction of the line have been under consideration for some time, and it is said that a contract has been arranged. A meeting of shareholders was called to be held Sept. 2, when various matters in connection with the organization of the company, and the letting of a contract, were under consideration. (Sept., pg. 615.)

Halifax and Guysboro Ry.—Negotiations are in progress between the Nova Scotia Government and a company in which G. N. Boak, of Halifax, is interested. This railway project has been under consideration for a number of years under the various titles of the Musquodoboit Valley Ry. the

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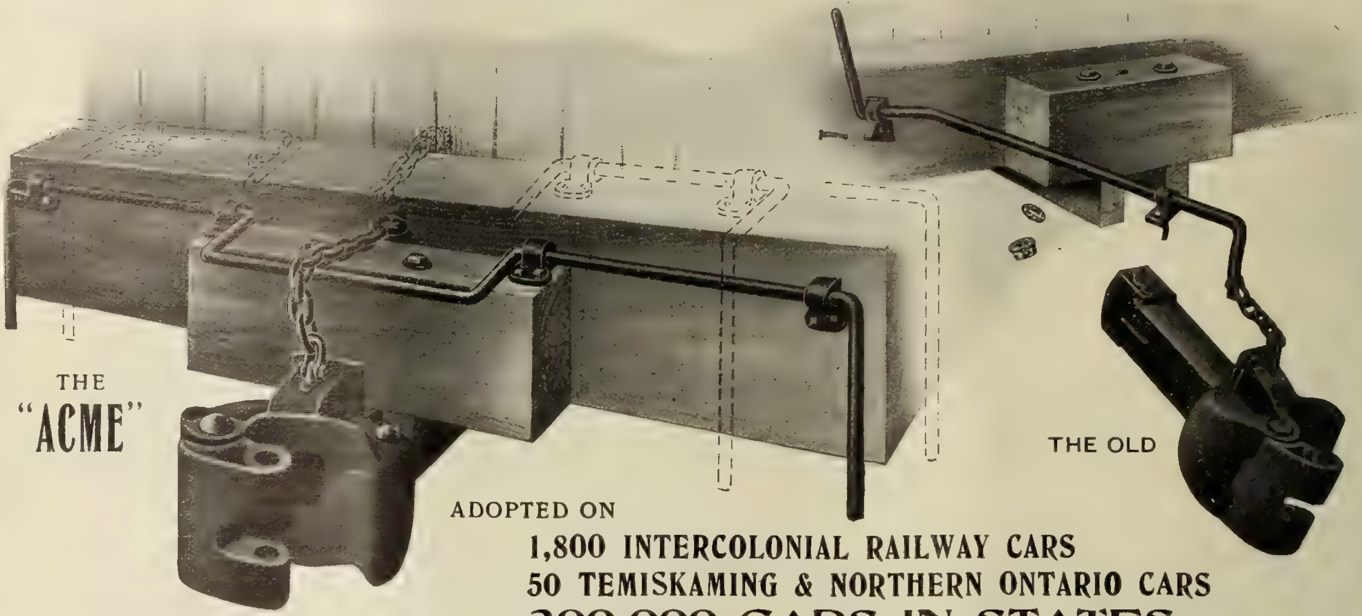

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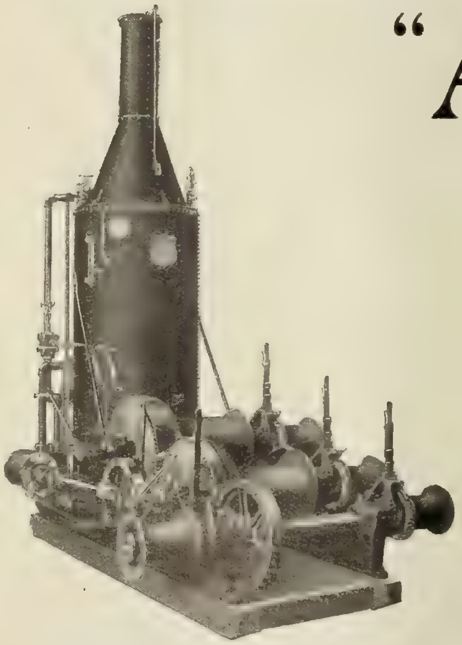

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Nova Scotia Eastern Ry., the Halifax and Northeastern Ry., and while considerable work has been done in the way of surveys, no construction has been entered upon. The Provincial Legislature has passed an act authorizing the Government to enter into a contract with any company prepared to undertake its construction, very liberal terms being offered, and the Dominion Parliament has voted subsidies upon the usual terms and conditions. Location surveys have been made for the line from Halifax to Guysboro via Cole Harbor, Lawrencetown, Chezzetcook, Musquodoboit Harbor, Meagher's Grant, Little River, and Upper Musquodoboit, a distance of 165 miles, with a branch from Country Harbor Cross Roads to Country Harbor mouth, a distance of 12 miles, and for a line from the Intercolonial Ry. near New Glasgow, via St. Mary's River, to a junction with the Halifax-Guysboro line near Melrose, a distance of about 41 miles. We were advised recently that nothing definite had come of the negotiations, and that it was impossible to say anything as to the prospects of construction. (See Halifax and Northeastern Ry., Sept., pg. 615.)

Howe Sound, Pemberton and Northern Ry.—A press despatch from Howe Sound, B.C., Sept. 13, stated that plans for this projected railway had been filed and that the promoters were negotiating for a right-of-way. Surveys made were for a line from Squamish, at the head of Howe Sound via Pemberton Meadows, to Anderson's Lake, a distance of 92 miles. Squamish is at present reached by stage from New Westminster, and Pemberton Meadows is reached through Lillooet, to which point a stage runs from Ashcroft on the C.P.R. transcontinental line. (Jan., pg. 21.)

Hudson Bay Pacific Ry.—Wharves have been under construction during the summer on Work Canal, just opposite Port Simpson, B.C., the proposed terminus of this projected line. Negotiations are reported to be in progress with the B.C. Government for the purchase of an area of about 3,000 acres of land adjoining the property now held by the company, for the purpose of laying out a townsite. The interest of Col. May in the project is reported to have been sold to a company in the U.S., and Dr. Benson recently arrived in Vancouver as its representative. (April, pg. 245.)

Intercolonial Ry.—The new station at Amherst, N.S., which, with its approaches, etc., has cost about $50,000, was formally opened Aug. 31.

It is reported that surveys will be undertaken as soon as possible for the construction of a second track between Halifax and Moncton. The second track has been constructed for some distance out from Halifax, N.S., and is practically completed between Moncton and Painsec Junction, N.B. Surveys are being made between Moncton and Truro, N.S., with the object of ascertaining whether it would be better to abandon the present route over the Cobequid Mountains, and to construct a new line in that vicinity, or to construct a new single-track line round the mountains, retaining the present line for the less important traffic.

The Railway and Engineering Review said recently: "The Dominion Government has voted $400,000 for the diversion of the Intercolonial Ry. from Georges River to Sydney Mines by way of Little Bras d'Or, from Sydney Mines to North Sydney by the existing line, and from North Sydney to Leitche's Creek by way of Upper North Sydney." The only votes for new construction in the vicinity of Sydney, passed last session of the Dominion Parliament, were $25,000 for a diversion of the line Sydney Mines to River George, and $2,437.50 on account of the extension from North Sydney to Sydney Mines, 2.7 miles, which the Minister of Railways stated April 27 had then cost $136,479.02, with $9,015 of claims in process of settlement. The line at present runs along the Little Bras d'Or Lake from the Grand Narrows, 46.15 miles from Point Tupper to Sydney, and includes, among others, the following stations: Georges River, mileage 74.84; North Sydney Jct., mileage 78.64; Leitche's Creek, mileage 81.07; Jefferson's, mileage 85.58; Sydney, mileage 91.48. Parliament did, however, vote a subsidy on the usual terms for the construction of a line from St. Peters, via the south shore of Bras d'Or Lake to Sydney, not exceeding 60 miles, which subsidy is available for any company having a charter covering the distance. Such a charter is held by the Cape Breton Ry., at present operating a line from Point Tupper to St. Peters. (Sept., pg. 615.)

The Knee Hill Ry. Co. was incorporated by the Alberta Legislature in 1907 to construct a railway from sec. 13, tp. 29, range 23, west of the fourth meridian, to either tps. 28, 29 or 30, ranges 23, 24, 25 west of the fourth meridian, and "to join, tap or cross any railway that may be constructed through or to the said townships or any of them." The company has a capital of $500,000, and is authorized to issue bonds to the amount of $15,000 a mile. It is given power for the purposes of its undertaking to construct a telephone and a telegraph line, and to enter into agreements with other companies for various purposes. Sec. 68 of the Provincial Railway Act, it is provided, shall not apply to the company's railway until some other railway is constructed through or to any of the townships named. The company's offices are at Calgary, and its provisional directors are: C. McPherson, Carbon, Alta.; A. J. McArthur, N. J. Christie, E. McBride, Calgary, Alta.; C. Hiebert, T. Gaddes, A. C. Walsh, Didsbury, Alta.; E. C. Morris, Indianapolis, Ind.; A. Finlayson, Bottineau, N.D. (Feb., 1907, pg. 89.)

The Kootenay, Alberta and Athabasca Ry. Co. was incorporated by the Alberta Legislature in 1907 to construct a railway from at or near the westerly boundary of Alberta in South Kootenay Pass, in tp. 1, range 1, west of the fifth meridian, thence easterly to Fishburn, thence southerly to the International boundary west of range 22, west of the fourth meridian, and then northerly through Edmonton to near Peace River crossing; and from at or near the westerly boundary of Alberta in the Crow's Nest Pass to the eastern boundary of Alberta at or near the junction of Red Deer River with the South Saskatchewan River, touching on the route, if deemed advisable, the city of Medicine Hat. The company is given power to enter into agreements with other companies; to construct telegraph and telephone lines; to issue $1,000,000 of common stock, and bonds to the extent of $15,000 a mile of line constructed. The company's offices are at Pincher Creek, and the provisional directors are: J. Hendry, I. B. Ferguson, A. E. Woods, G. E. MacDonald, J. R. Seymour, Jas. Jeffrey, Vancouver, B.C.

London and Port Stanley Ry.—An officer of the Pere Marquette Rd. is quoted as saying: "We intend to turn all our trade from the Western States across the lake from Toledo, Ohio, to Port Stanley, Ont. We are planning to invade the east for the carrying of all general merchandise for Western Ontario by boat from Montreal and Hamilton, as well as Buffalo and Cleveland." The carrying out of such plans as these would necessitate considerable works of betterment not only on the waterfront at Port Stanley, but also along the line to London. The L. and P.S.R. is operated under lease by the Lake Erie and Detroit River Ry., which is the Canadian end of the Pere Marquette Rd. The L. and P.S.R. is owned practically by the city council of London, Ont. (Aug, pg. 547.)

Matane and Gaspe Ry.—An office has been opened at St. Flavie station, on the Intercolonial Ry., by the H. J. Beemer Co., contractors for the construction of this projected railway. Preliminary work has been started on the first section. The contract is reported to cover the completion of 35 miles of line with sidings. R. E. Hunter is Chief Engineer. and Superintendent of construction. (Sept., pg. 617.)

Niagara Peninsular Ry.—The Ontario Legislature has incorporated a company with this title to construct a railway in the townships of Humberstone and Wainfleet, and the village of Port Colborne, Ont. The railway is projected for the purpose of conveying freight to and from the premises of the Canadian Portland Cement Co., and subsidiary companies, from the western bank of the Welland Canal in Port Colborne, westerly through the townships of Humberstone and Wainfleet, with a branch for 2.75 miles northeasterly in Humberstone tp. The provisional directors are: W. D. Matthews, M. J. Haney, R. O'C. Miller, F. G. B. Allan and T. Gibson, Toronto. The capital is $50,000, and the company's offices are in Toronto. (Feb., 1907, pg. 89.)

Ottawa, Brockville and St. Lawrence Ry.—A call of 3% upon all the shares of the company, being a third call, was made by the directors at a meeting held Aug. 24, and was payable at the company's offices, 38 Sparks St., Ottawa, Sept. 24. (Aug., pg. 547.)

Quebec Bridge and Ry. Co.—The various arrangements in connection with the taking over of the bridge works by the Dominion Government are going forward. In the meantime the board of engineers appointed by the Government to consider plans for the reconstruction of the bridge have started work. The commission, of which H. E. Vautelet is chairman, met for the first time Aug. 31, and on Sept. 2 its members went to Quebec for the purpose of examining the wrecked bridge. They were met by E. A. Hoare, Chief Engineer of the Bridge Co., and M. P. Davis, the contractor for the substructure. The Commissioners spent nearly the whole of Sept. 3 in going over the piers making measurements, etc., and on returning to Quebec, inspected the plans of the substructure at the company's offices. Later on the Commissioners went to New York, where they had a conference with T. Cooper, the consulting engineer of the company, and then went on to Phœnixville, Pa., for a consultation with the company which had the contract for the superstructure. A press report states that the wreck of the bridge will be sold for scrap, the old plans destroyed, and the work begun entirely anew. The cost of the new structure is estimated at $10,000,000. This is, of course, entirely conjecture, as nothing will be done until the engineers have made some recommendations, and the Government has had time to consider them. (Sept., pg. 619.)

Temiskaming and Northern Ontario Ry.—Steel was laid to 273 miles north of North Bay, Ont., Sept. 9, and it was expected that the remaining mileage to the junction with the route of the National Transcontinental Ry. will be laid early in Oct. The townsite at the junction is to be named Cochrane, and is being surveyed and laid out. An area of 1,000 acres has been reserved for the townsite, and the lots will be put in the market in Oct. There are three small lakes adjoining the site, one of which is to be reserved to provide a water supply for the new town. A train service will be put on as soon as the track is completed to the junction, so as to enable supplies to be got in for the National Trans-

THE ELECTRIC HEADLIGHT

The following letter was received under date of May 8, 1908, from Mr. J. W. Cleary, Travelling Engineer Pyle-National Electric Headlight Co.:

"I learn from ____________ the Master Mechanic here, that an engineer running between ____________ and ____________ discovered a broken rail with the Pyle-National Electric Headlight and made the stop without ditching his train. One or two pairs of wheels got off, but that was a small affair to what it would have been where a foot of the rail was broken off. Also an engineer running east of here found some cars shoved out on the main line. He saw them with the 'Electric' and made the stop without hitting them."

PYLE-NATIONAL ELECTRIC HEADLIGHT CO.
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OFFICE AND WORKS

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continental Ry. construction work. The ballasting of the line will be taken in hand and completed in the spring.

The question of the construction of a spur line to the wharf at Haileybury is before the courts, an application having been made for an injunction to prevent the Commission constructing the spur on the route chosen. A resolution has been passed by the Haileybury Town Council approving of the route selected by the Commissioners.

An extension of the Charleton branch into James township, on the Montreal River, is being advocated, but no surveys have yet been made. (Sept., pg. 619.)

Toronto Yonge St. Bridge.—The Toronto City Engineer has been asked by the Board of Control to report as to the cost of a temporary bridge over the railway tracks at the foot of Yonge St., pending the settlement of the viaduct question. An estimate for a bridge 30 ft. wide, with room for one street car track, places the cost at $36,000. (Oct., 1907, pg. 757.)

Vancouver and Nicola Valley Ry. Co.—The provisional directors of this company, which was incorporated at the last session of the British Columbia Legislature are: W. H. Armstrong, J. Hendry, L. A. MacKechnie, R. P. McLennan, F. R. Stewart, and F. H. Lantz, Vancouver. (April, pg 247.)

The Vermillion and Cold Lake Ry. Co. was incorporated by the Alberta Legislature in 1906, to construct a line from Vermillion, on the Canadian Northern Ry., northeasterly to the North Saskatchewan River between ranges three and five, west of the fourth meridian, thence to Frog Lake and on to Cold Lake, with a branch from Vegreville as nearly south as possible, to connect with the G.T. Pacific Ry. Power is also given to construct other branch lines where necessary, not exceeding in any one case six miles in length. The provisional directors are: A. B. Moor, R. W. Gunn, Lloydminster, Alta.; M. W. Hopkins, Saddle Lake, Alta. In the following session the company's powers were amended by Lloydminster being named as the starting point of the line, the new route being described from Lloydminster, northwesterly to its authorized line on the south side of the North Saskatchewan River.

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Railway Commissioners' Traffic Orders.

5224. Aug. 25.—In the matter of the application of the Michigan Central Railroad Co., under section 29 of the Railway Act, for an order to vary or rescind order 4796, dated May 20, 1908, directing that the toll to be charged by the applicant company from or to its point of interchange with the Pere Marquette Rd., for the switching of cars delivered to the P.M.R. by the G.T.R. Co., in St. Thomas, Ont., or by the P.M.R. to the G.T.R., in St. Thomas, be $3 per carload, so as to make the provisions of the said order harmonize with the provisions of the Board's general switching order no. 4988, dated July 8; whereas order 4796, dated May 20, 1908, provided that it should be without prejudice to variation or rescission upon the application of any of the parties interested, or upon the Board's motion if it did not harmonize with the conclusions arrived at by the Board when disposing of the general interswitching matter. The Board orders that paragraph 1 of order 4796 be amended by striking out the word "three" in the last line of the said paragraph and substituting therefor "the charges authorized and provided in paragraph 4 of the general interswitching order 4988."

TARIFF ASSOCIATIONS' POWER OF ATTORNEY.

The Secretary of the Board issued the following circular Sept. 10:

Referring to order 5117, covering power of attorney for tariff associations. In view of the question that has arisen as to whom the powers of attorney for tariff bureaux, etc., should be signed by, it has been decided that the same officers as were specified in the order re the official classification are the proper persons, and the last part of the order should read as follows:

The........................
(Name of carrier)

By ....
(Its —— President)

Attest:

....
(Secretary).

Order 5117 was published in our Sept. issue.

◆

October Birthdays.

Many happy returns of the day to

R. C. F. Alexander, Resident Engineer C.P.R., Farnham, Que., born at Guelph, Ont., Oct. 20, 1875.

R. A. Burford, cashier C.P.R. ticket office, New York City, born at Brooklyn, N.Y., Oct. 4, 1878.

G. E. Burns, Freight Claims Agent C.P.R. Eastern Lines, born at St. Thomas, Ont., Oct. 6, 1863.

T. C. Burgess, Commercial Agent G.T.R., Minneapolis, Minn., born at New York City, Oct. 2, 1853.

F. F. Busteed, General Superintendent Pacific Division C.P.R., Vancouver, B.C., born at Battery Point, Que., Oct. 10, 1858.

C. E. Cartwright, Division Engineer C.P.R., Vancouver, B.C., born at Toronto, Ont., Oct. 13, 1864.

G. L. Courtney, ex-General Agent C.P.R., Victoria, B.C., born at Chatham, Ont., Oct. 7, 1868.

W. D. Cunneyworth, Freight and Passenger Agent Temiskaming and Northern Ontario Ry., born at Bronte, Ont., Oct. 22, 1865.

L. V. Druce, Commercial Agent G.T.R., Seattle, Wash., born at London, Eng., Oct. 20, 1873.

J. Earls, ex-Secretary and Treasurer Canadian Freight Association at Toronto, Ont., born in Ireland, Oct. 30, 1838.

A. H. Harris, C.P.R. Special Traffic Representative, Montreal, Que., born in Devonshire, Eng., Oct. 15, 1855.

B. W. Greer, ex-General Freight Agent C.P.R., Vancouver, B.C., born at Aldboro, Ont., Oct. 4, 1867.

W. S. Rollo, joint agent G.T.R. and Central Vermont Ry., St. John's Que., born at Dundee, Scotland, Oct. 8, 1852.

J. W. N. Johnstone, General Passenger Agent Reid Newfoundland Co., St. John's, Nfld., born at Campobello, N.B., Oct. 4, 1878.

W. M. Kirkpatrick, General Freight Agent Ontario Division through traffic, C.P.R., Toronto, born at Kingston, Ont., Oct. 8, 1874.

W. B. Lanigan, Assistant Freight Traffic Manager C.P.R., Winnipeg, born at Three Rivers, Que., Oct. 12, 1861.

J. W. Leonard, General Manager C.P.R. Eastern Lines, Montreal, born at Epsom, Ont., Oct., 1858.

W. T. Marlow, Import Freight Agent C.P.R., Montreal, born at Limerick, Ireland, Oct. 25, 1872.

R. Marpole, General Executive Assistant C.P.R., Vancouver, B.C., born in Montgomeryshire, Wales, Oct. 9, 1850.

F. G. Martyn, Assistant Superintendent C.P.R., London, Ont., born at Bury, Que., Oct. 7, 1848.

H. Paton, President Shedden Forwarding Co., director Bell Telephone Co., Montreal, born at Johnstown, Renfrew, Scotland, Oct. 5, 1852.

D. Pottinger, General Manager Canadian Government Rys., Moncton, N.B., born at Pictou, N.S., Oct. 7, 1843.

N. L. Rand, Master Mechanic I.C.R., Moncton, N.B., born at Shediac, N.B., Oct. 28, 1843.

G. B. Reeve, ex-Second Vice-President and General Manager G.T.R., La Mirada, Cal., born in Surrey, Eng., Oct. 23, 1840.

Sir Thomas G. Shaughnessy, President C.P.R., Montreal, born at Milwaukee, Wis., Oct. 6, 1853.

C. W. Spencer, ex-General Manager Mackenzie, Mann & Co.'s Railway Lines east of Port Arthur, Montreal, born at Kemptville, Ont., Oct. 31, 1857.

W. S. Taylor, ex-Treasurer C.P.R., born at Dornoch, Sutherlandshire, Scotland, Oct. 18, 1839.

L. H. Wheaton, Engineer Maintenance of Way and Structures, Halifax and Southwestern Ry., Bridgewater, N.S., born at Sackville, N.B., Oct. 5, 1866.

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Index to The Railway and Marine World.

A complete index to the matter contained in the Railway and Marine World for 1908, Jan. to Dec. both inclusive, is in course of preparation, and will be printed and ready for distribution early in Jan., 1909. The index for 1907, issued in Jan. last, met with much favor, and we have no doubt the one for the current year will be equally appreciated. A large portion of the matter we publish from month to month is of great permanent value for reference, and of course this value is much enhanced by a complete classified index. We were much gratified when we issued our index for 1907 to find that a large number of subscribers file and bind the paper.

It is not the intention to make a general distribution of the current year's index, but a copy will be sent to each subscriber who desires one, and who will notify us to that effect. A letter or post card, simply stating that the index is desired, and giving the subscriber's name and address, will be sufficient. Early application is requested, and subscribers who wish a copy are asked to write us at once. "Do it now." The number of copies to be printed will be governed by the number of applications received.

◆

A Western Railway Map.

The Stovel Co., Winnipeg, has issued a railway commercial routing and shippers' map of Western Canada, which is undoubtedly the best and most complete map of the railway systems west of Port Arthur that has been got out. The map, covering the territory from Port Arthur to the Rocky Mountains, is 80 by 26 inches, and shows in clear, legible, uniform black lettering on a white background, every railway station from Lake Superior to the Rockies, with the principal cities, towns and divisional points well displayed. Another and smaller map covers British Columbia, and can be mounted with the larger one. The most valuable feature of the maps is that each railway system is shown in a separate color, so that a reference to the map not only locates any given place, but at the same time tells on what railway it is located, thus avoiding searching for railway names. In addition to this each division or branch line is plainly indicated by its local name. A well-arranged index gives every town on the map, and shows at a glance whether it is a post office, public telegraph office, prepaid freight station, prepaid express office or one from which money orders are issued. The maps are of great value to transportation officials and to shippers and business men generally.

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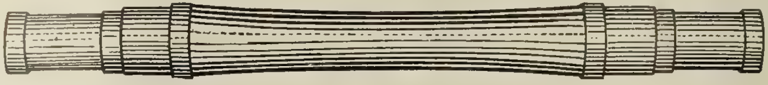
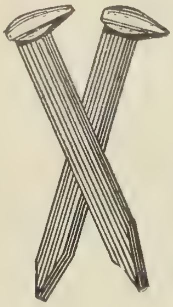
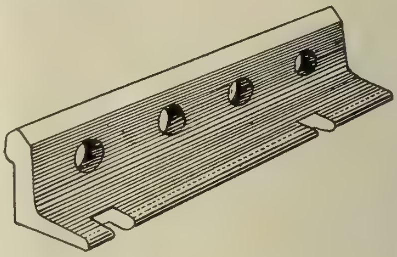




RAILWAY AXLES
ANGLE BARS AND
TRACK SPIKES



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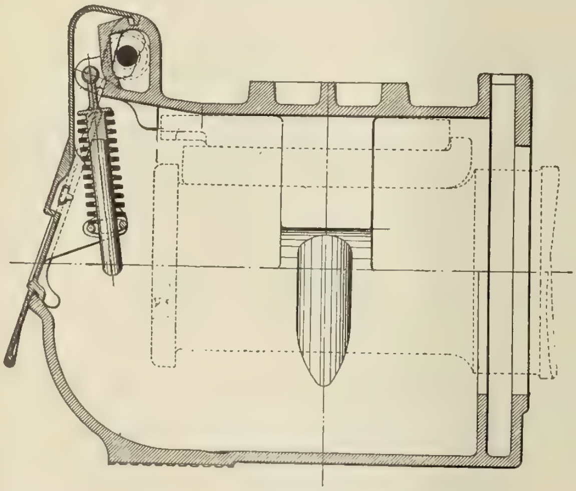

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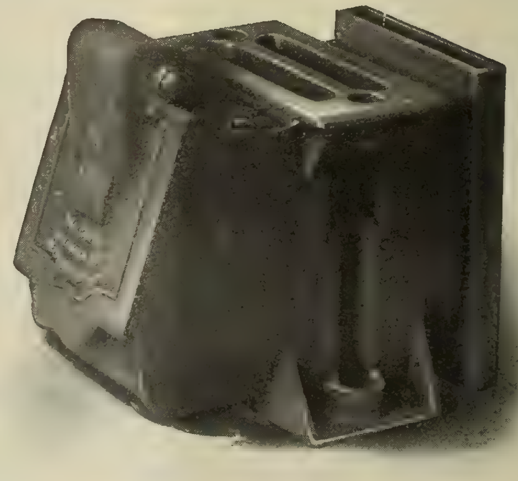

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New Brunswick Tan Bark Rates.

In our last issue we gave the Board of Railway Commissioners' order 5119, dismissing the complaint of F. A. Cutting against the C.P.R. The order was based on the report of the Chief Traffic Officer, J. Hardwell, which on account of its importance we now give in full as follows:

F. A. Cutting, of Boston, Mass., a dealer in tan bark on an extensive scale, presented his own case at the hearing at Ottawa, Mar. 12, 1908, in a complaint that while the C.P.R. carries tan bark to Boston and other New England points at lumber rates from points in Quebec and Ontario, it charges higher than lumber rates from points in New Brunswick. The company received permission to file a written answer, which it did on April 16, and the applicant's reply was filed May 12. The statement that lumber rates are applied on bark from the company's stations in Quebec and Ontario to Boston, etc., is correct, and was admitted. There was some confusion of dates at the hearing; but so far back as the records of the Commission go, taking Bristol, the only C.P.R. station where the applicant has any bark for shipment, as an illustrative point, the rates from New Brunswick points, on the C.P.R. Atlantic Division, have been as follows, viz.:

From May 21, 1904, to May 11, 1906, bark 17½c., or 4½c. higher than lumber.

From May 12, 1906, to July 27, 1906, bark 15c., or 2c. higher than lumber.

From July 28, 1906, to Mar. 3, 1907, bark 13c., or the same as lumber.

From Mar. 4, 1907, to date, bark 15c., or 2c. higher than lumber.

Mr. Carvell, K.C., appeared for J. D. Dickinson & Sons, tanners of Woodstock, N.B. Aside from any small local firms, this firm shares the tanning industry of New Brunswick with Peters & Sons, of St. John. What was then the largest tannery in the province, the Hyman tannery of Benton, was closed a few years ago at a time when the bark rate was higher than the lumber rate. Although Mr. Cutting did not claim to represent them, he insisted that his case was that of the bark producers also, whose interest it was that they should not be confined to the provincial market. It was admitted that the supply of bark in New Brunswick is running short, and that in 15 or 20 years it will be exhausted. Mr. Carvell contended, and so does the C. P. R. in its written answer, that a lower rate than the present to New England points would divert the bark from the provincial tanners, who, it was stated, are willing to pay the market prices, but would be unable to continue their operations without a continuous supply. Mr. Cutting stated that the C.P.R.'s Fourth Vice-President had told him that the higher rate to New England was charged on bark for the purpose of protecting the tanner, and that if the difference was not sufficient he would protect him still further.

Broadly stated, the complainant's contention is that the company is guilty of discrimination in charging higher than lumber rates from New Brunswick while it charges lumber rates from Quebec and Ontario; the defence is that this discrimination is not unjust, and that the reduction in the bark rates would put the New Brunswick tanners out of business.

Sec. 315 of the Railway Act, s.s. 1, provides that tolls shall always, under substantially similar circumstances and conditions, in respect of all traffic of the same description and carried in or upon the like kind of cars, passing over the same portion of the line of railway, be charged equally to all persons, and at the same rate. I do not consider that the company's tariff which is questioned is at variance with this clause of the Act in any particular.

Lumber and bark are not traffic of the same description. The applicant admits that a box car which would carry 60,000 lbs. of lumber, could not contain over 30,000 lbs. of bark. The two commodities are put to totally different uses and the prices are not similarly based.

The two commodities are not usually carried in the like kind of cars. Box cars are preferred and are principally used for the carriage of lumber; and these are generally available, when released, for reloading home or elsewhere. Bark, on the contrary, is so light compared with bulk, that it has to be loaded high on racked open cars, which, as a rule, can be loaded one way only. Mr. Cutting has a considerable number of private cars fitted with permanent racks which have to be returned light in all cases, and on which the railway companies pay him mileage.

Shipments from New Brunswick and Quebec (or Ontario) do not pass over the same portion of the company's railway.

Sub-section 4 of the same section of the Act provides that no toll shall be charged which discriminates between different localities. It is on this provision that the applicant rests his case. It does not seem to me that because lumber and bark are carried at the same rates to New England points from Quebec and Ontario, that the principle is sound, or that it should necessarily be uniform throughout widely separated territories. The true standard of relativeness is the classification, which makes a distinction between bark and lumber, the former being in the 7th, the latter in the 10th class. The bark shippers of New Brunswick and Quebec may be competing in the same New England markets; but it must be the amount of the rate in itself that interests them, not as it compares with that on lumber or lath or shingles. The bark rates from the C.P.R. line between McAdam Jct. and Edmundston, where the bark shipments are made, to Boston, run from 12½ to 13¾c.; those from the company's lines in Quebec south of the St. Lawrence from 12⅔ to 14c. per. 100 lbs. The distance from Newport, Vt., where the C.P.R. Quebec lines connect with the U.S. system, to Boston, is 251 miles; from Vanceboro, Me., the junction between the New Brunswick and U.S. systems, it is 366 miles. The New Brunswick bark rates compare favorably with those from Quebec, notwithstanding that they are not lumber rates. If the New Brunswick rates were equalized by levelling up the lumber rates, instead of levelling down the bark rates, the applicant's objection would, inferentially, be removed. The C.P.R. in the St. John Valley runs near and approximately parallel to the International boundary, and on the other side of the boundary, the Bangor and Aroostook Rd. also charges higher rates on bark than on lumber to the Boston market, and Mr. Cutting ships from this B. and A. territory, yet he has no fault to find with that company, for the reason that it has no other section on which it charges the same rates on bark as on lumber. As there is no duty on bark going into the U.S., it seems to me that the adjoining shipping territories of Maine and New Brunswick are more analogous than are the widely separated provinces of New Brunswick and Quebec, with the State of Maine between them.

As to the reasonableness of the present bark rates from New Brunswick; for at least two years down to May, 1906, they were 4½c. over the lumber rates; they are now 2c. higher. They were the same as lumber for about seven months, the reduction, according to the evidence, having been made to help clear away some accumulations of bark following the close of the Hyman tannery at Boston. The applicant admitted that he had bought New Brunswick bark when the rate was on the higher basis (and it is to be assumed that he would not have done so unless he saw a profit), and had shipped when the rate was low, but he did not buy when the rate was low. The 250 cords which he still has at Bristol were what was left when the rate went back from 13 to 15c. from that point.

The C.P.R. proportion to Vanceboro, Me., of the through rate from Bristol to Boston is lower than the local rates from the same distance to the Woodstock or St. John tanneries and against these there is no complaint. It is 6½c. to Vanceboro, as against 8½c. to Woodstock or St. John. If the lumber rate were applied the proportion to Vanceboro would be further reduced to 5½c. The joint rate from Bristol to Boston, 450 miles, is only two-thirds of a cent per ton per mile for division between three companies—a not unreasonable rate for this distance over the rails of a single company.

I cannot find that by the conditions complained of the applicant is subjected to any undue or unreasonable prejudice or disadvantage.

A Railway to Hudson Bay.

Speaking at Niagara Falls, Ont., Sept. 16, Sir Wilfrid Laurier said the Dominion Government had undertaken the construction of another railway—the Hudson Bay railway. It was a line that concerned principally the people of the west, but he hoped the people of Ontario would agree with him that what concerned one portion of the community concerned every part of it. He then proceeded: "We have provided that this railway is to be constructed out of the price of land which is set apart for this very purpose. We have come to the conclusion that this railway is a necessity, owing to the conditions in which our fellow-citizens in the west are placed. It will give them an alternative or optional route. At present all the wheat as soon as it is tracked is sent over to Lake Superior. We want to provide another railway by Hudson's Bay. There will then be the present route and the Hudson Bay route, and the man who raises wheat and cattle will have two outlets for his production. We have been asked: 'Are you not going to hurt the trade of the St. Lawrence if you do that?' Oh, ye of little faith,' the trade of Canada is too great even for these two outlets. What we see coming will be more than sufficient for both the St. Lawrence and the Hudson Bay routes. We have come to the conclusion that the time to build it is now; not to-morrow, but now, and now we have surveyors in the field looking at the condition of the country and preparing plans for us, which we shall be prepared to put into execution as soon as we receive them. The Government will build the railway, or rather somebody will be entrusted with the building, but whatever we do all the terminals and all the elevators shall be built by the Government and retained under all circumstances by the Government, so as to insure the largest measure of benefit possible to the Canadian people in the Northwest Provinces."

The second survey party sent out by the Dominion Government to make a survey for the route for this projected railway left Winnipeg for Sifton, Man., Sept. 1. At that point the party were to take to boats and work along the water route. Two other parties were expected to be sent out by Sept. 30. (Sept., pg. 629.)

The railway now forming part of the G.T.R. between Montreal and Rouse's Point, N.Y., was opened for traffic Aug. 26, 1851.

The old offices of the G.T.R. on St. Etienne St., Montreal, which have been unoccupied for the past six years, are to be torn down and the ground cleared.

N. CURRY, President
N. A. RHODES, Vice-President

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J. M. CURRY, Sec.-Treas.

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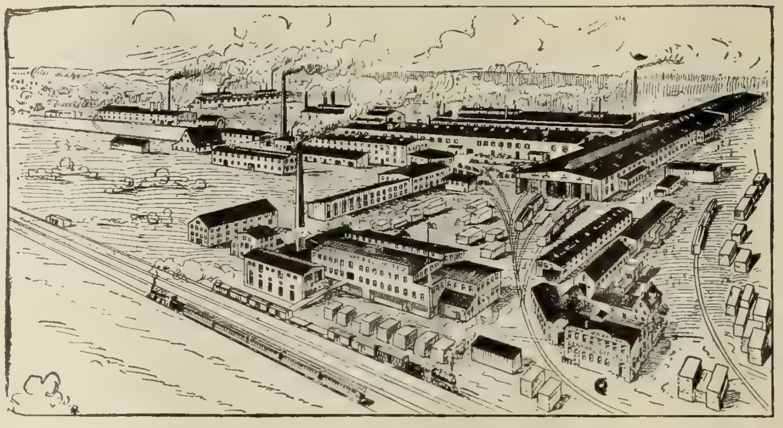

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MAINLY ABOUT PEOPLE.

T. O'Brien, K.C., of Golden, B.C., who died at Spokane, Wash., Sept. 4, was local solicitor for the C.P.R.

Mrs. Kelliher, wife of B. B. Kelliher, Chief Engineer G.T. Pacific Ry., died somewhat suddenly at Montreal, Sept. 1.

H. Roy, a draughtsman in the engineering offices of the Transcontinental Railway Commission, Ottawa, died there Sept. 1.

Lady Shaughnessy sailed on the Empress of Ireland, Sept. 18, for England, with two of her daughters, returning to school there.

Miss K. Mackenzie, daughter of W. Mackenzie, President Canadian Northern Ry., was married at Toronto Sept. 23 to W. W. Beardmore.

W. C. Matheson, C.E., of the Canadian Northern Quebec Ry., was married in Montreal August 29 to Miss C. W. Rowe of Lucan, Ont.

A. H. Harris, Special Traffic Representative C.P.R., was a passenger on the s.s. Empress of Ireland, which sailed from Quebec Sept. 18.

Sir Thomas and Miss Shaughnessy, Sir H. Montagu Allan, with Lady Allan, attended the Ontario Jockey Club meeting at Toronto at the end of September.

R. Marpole, General Executive Assistant C.P.R., and Mrs. Marpole, have returned to Vancouver, B.C., from a three months' holiday trip to Great Britain.

The marriage of Miss A. Tiffin, daughter of E. Tiffin, General Traffic Manager I.C.R., to E. Schleuter, Preston Springs, Ont., took place in Montreal Sept. 9.

E. Dent, President, and A. Bremner, director, Quebec Central Ry., who have been visiting Canada, returned to England, Sept. 18, on the C.P.R. Empress of Ireland.

Lord Strathcona, who was to have sailed from Liverpool, Eng., for Canada, Sept. 9, was compelled to cancel the visit, having been ordered a period of rest by his physician.

Lady Van Horne and Miss Van Horne are not expected to return to Montreal from Sir Wm. Van Horne's summer residence at St. Andrew's, N.B., until the end of Oct.

W. A. Quibell, stipendiary magistrate at Winnipeg for the territory through which the National Transcontinental Ry. passes, was married there, Sept. 16, to Miss B. McWain.

J. Fenwick, foreman blacksmith C.P.R. locomotive shops Montreal, died Sept. 17. He was for a time in the G.T.R. employ, leaving it to engage with the C.P.R. in 1883.

Guy Tombs, General Freight and Passenger Agent Canadian Northern Quebec Ry., returned to Montreal, Sept. 1, from a month's trip over the railways in Western Canada.

Mrs. MacTier, wife of A. D. MacTier, Assistant to the Vice-President C.P.R., who, accompanied by her family, spent the summer in Great Britain, returned to Montreal Sept. 10.

Wm. Harty, son of Hon. W. Harty, M.P., President of the Canadian Locomotive Co., Kingston, Ont., was married at Toronto, Sept. 3, to Miss Evelyn Kerr, daughter of Senator Kerr.

A. Piers, Manager C.P.R. Steamships, accompanied by Mrs. and Miss Piers, sailed by the s.s. Empress of Britain Sept. 4 for Liverpool, Eng., where he has leased a house and will reside in future.

Jas. Somerville, Second Vice-President International Association of Machinists, Ottawa, was fined $3 and costs for applying the term "scab" to a machinist named Caldwell in the employ of the C.P.R.

Joseph Wallace, who died at Red Deer, Alta., recently, retired from active service in 1907, after having been connected with the old Great Western Ry., and its successor the G.T.R., for about 35 years.

E. A. Lancey, chief clerk to the C.P.R. Freight Traffic Manager, Montreal, was presented recently with a silver tea service and leather suit case, by the office staff, on the occasion of his marriage on Sept. 16.

F. Barlow Cumberland, of Port Hope, Ont., Vice-President Niagara Navigation Co., was re-elected President of the Ontario Historical Society at the annual meetings, which closed at London, Ont., Sept. 11.

A warrant has been issued for the arrest of John Hyde, chief clerk in the Roadmaster's Department of the Toronto, Hamilton and Buffalo Ry., on a charge of defrauding the company by means of stuffed pay sheets.

The engagement is announced of H. A. K. Drury, Assistant Engineer Board of Railway Commissioners, Winnipeg, to Miss Helen Richardson, daughter of Archdeacon Richardson. The marriage is to take place next spring.

D'ARCY SCOTT

Assistant Chief Railway Commissioner for Canada.

Josiah Holmes, who died recently at St. Catharines, Ont., aged 90, was father of W. H. Holmes, now of Truro, N.S., the inventor of the corridor railway carriage now in general use in Great Britain and on the continent of Europe.

A. Milton, chief accountant of the Paymaster's Office, C.P.R., Winnipeg, was killed by being run over by a train at Eagle River, Ont., while paying section men recently. Two of the section men were also killed at the same time.

V. Pelletier was presented with a gold watch by the passenger staff of the Intercolonial Ry at Montreal, on his leaving the service to take up his duties as aide-de-camp to his uncle, the newly appointed Lieut.-Governor of Quebec.

T. Lowry, President Minneapolis, St. Paul and Sault Ste. Marie Ry., has been seriously ill with a complication of diseases, at his Minneapolis, Minn., residence, and for some time his life was despaired of. He is reported to be recovering.

Mrs. Maharg, wife of C. S. Maharg, Superintendent C.P.R. at Saskatoon, Sask., died there Sept. 12. She had been ailing for some time, and had only returned home from a trip to California shortly before her death. She was buried in Toronto.

E. Dent, President, and A. Bremner, a director of the Quebec Central Ry., arrived in Quebec from London, Eng., Aug. 30, for the purpose of inspecting that company's railway, and consulting with the Vice-President, F. Grundy, and the officials.

D. O. Ives, on retiring from the position of General Traffic Manager Wabash Rd recently, was presented with a silver service by the staff, and entertained at dinner by the principal traffic officials of the line at the Mercantile Club, St. Louis, Mo., Aug. 29.

O. O. Winter, who has retired from the position of General Superintendent G.T. Pacific Ry., was presented with a diamond ring by the company's employes at Winnipeg, at a dinner given in his honor, Sept. 1. A pearl necklace was presented to Mrs. Winter at the same time.

W. Hately, who has been appointed accountant in the office of the Superintendent Middle Division, G.T.R. Toronto, was, Sept. 2, presented with a gold watch by the members of the G.T.R. divisional freight office staff at Hamilton, Ont., with which he had been for some time connected.

Mrs. J. Dunsmuir has entered an action against her son, Hon. Jas. Dunsmuir, Lieut.-Governor of British Columbia, to secure an accounting of the Dunsmuir estates since 1889. The property includes coal mines, colliery railways, steam and sailing vessels, and until recently the Esquimalt and Nanaimo Ry.

G. G. Hare, Chief Engineer, and J. Erwin, Roadmaster Kingston and Pembroke Ry., accompanied by W. F. Nickle, M.L.A., were going over the line on a gasoline car Sept. 2, and when near Mississippi, Ont., collided with a handcar which had been left on the track. All three were thrown off the car, but Mr. Nickle only was injured, and that slightly.

W. H. Ardley, who has been appointed acting General Auditor G.T.R. and G.T. Pacific Ry., Montreal, was born in London, Eng., April 24, 1858, and entered G.T.R. service Nov. 1, 1882, since when he has been, to Nov. 1, 1894, clerk in the Chief Accountant's office; Nov. 1, 1894, to Jan, 1, 1908, chief clerk and general book-keeper in General Auditor's office; Jan. 1, 1908, to Sept. 1, 1908, Auditor of Disbursements.

John Hendry, of Vancouver, B.C., was elected First Vice-President of the Canadian Manufacturers' Association at the annual meeting in Montreal, Sept 17. Among other things, he is President of the Vancouver, Westminster and Yukon Ry., which recently sold the line it constructed between New Westminster and Vancouver to the Great Northern Ry. Co., but which still possesses power to construct a line from Vancouver to Dawson, Yukon.

J. W. Wallace, Travelling Auditor I.C.R., Moncton, N.B., who died Sept. 17, was born at Hillsboro, N.B., Dec., 1847; entered I.C.R. service in 1869, and was to 1874, agent, first at Penobsquis, and later at Salisbury, and from 1874 to 1879 Assistant Auditor at Moncton. When a section of the C.P.R. was owned by the Dominion Government in 1879, he was appointed instructor in the clerical department of that road. He returned to I.C.R. service in 1899, as Travelling Auditor, which position he held until his death.

R. L. Thompson, who has been appointed District Passenger Agent C.P.R., Toronto, was born at Montreal, Aug. 17, 1873, and entered C.P.R. service Aug., 1888, in the General Passenger Department, occupying positions as stenographer, advertising, accounts,

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claims, and rate clerk, to July, 1904, since when he has been, to Nov., 1905, assistant chief clerk and Nov., 1905, to Jan., 1907, chief clerk to Passenger Traffic Manager, Montreal; Jan., 1907, to Sept 8, 1908, General Agent, Passenger Department, C.P.R., Cincinnati, O.

J. T. Hallisey, who was recently appointed acting District Superintendent of the Halifax and St. John districts, Intercolonial Ry., was born at Beaver Bank, N.S., Dec. 29, 1862, and entered the Intercolonial Ry. service Dec. 12, 1879, as telegraph operator, since when he has been successively: April, 1882, to Nov., 1890, train dispatcher, Truro, N.S.; Nov., 1890, to Apr., 1903, Chief Dispatcher Sydney and Oxford Districts, New Glasgow, N.S.; Apr., 1903, to June 4, 1908, Chief Dispatcher, Truro, N.S., all service with the I.C.R.

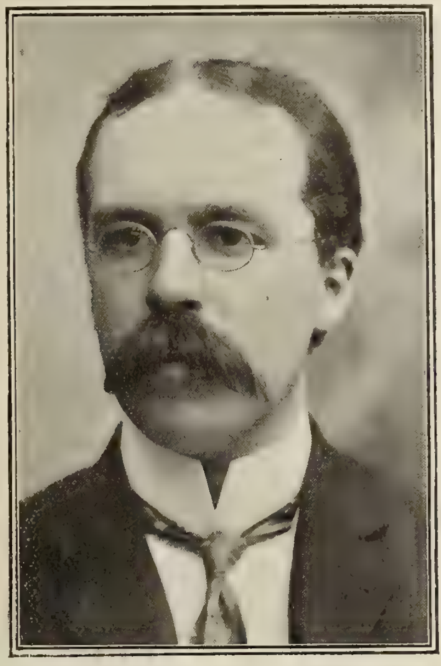
Frederick Passmore Gutelius, who has been appointed General Superintendent Lake Superior Division, C.P.R., was born at Mifflinburg, Pa., Dec. 21, 1864. Graduated from Lafayette College as civil engineer 1887. Entered railway service 1888, since when he has been consecutively to 1892 assistant engineer and assistant supervisor Pennsylvania Co., at Pittsburg, Pa.; 1885 to 1898, General Superintendent Columbia and Western Ry.; 1898 to 1900, Superintendent C.P.R. at Nelson, B.C.; 1900 to 1902, various positions in engineering department same line, 1902 to March, 1906, Engineer Maintenance of Way, and March, 1906, to Sept. 15, 1908, Assistant Chief Engineer Eastern Lines C.P.R., Montreal.

C. B. Foster, who has been appointed Assistant General Passenger Agent C.P.R., Vancouver, and whose portrait appears on the first page of this issue, was born at Kingston, Kings County, N.B., Sept. 30, 1871, and entered railway service in 1891, since when he has been successively: April, 1891, to Oct., 1892, stenographer, passenger department, St. John, N.B.; Oct., 1892, to Sept., 1893, senior clerk, passenger department, St. John; Sept., 1893, to July, 1899, Travelling Passenger Agent, St. John; July, 1899, to Feb. 8, 1902, chief clerk, passenger department, St. John; Feb. 8, 1902, to Nov. 22, 1904, District Passenger Agent, St. John; Nov. 22, 1904, to Sept. 8, 1908, District Passenger Agent, Toronto; entire service with C.P.R.

W. E. Davis, Passenger Traffic Manager G.T.R., who has also been appointed to a similar position G.T. Pacific Ry., was born in Niagara Co., N.Y., in 1850. He entered railway service in 1868, as office boy on the Hannibal and St. Joseph Rd., now a part of the Burlington Rd. In Aug., 1877, he was appointed Passenger Agent, Chicago and Lake Huron Rd., Chicago, Ill., which later included the Detroit, Grand Haven and Milwaukee Ry., the Toledo, Saginaw and Muskegon Ry., and the Cincinnati, Saginaw and Mackinaw Rd., remaining in that capacity until the consolidation of the G.T.R. subsidiary companies under the present management, April 1, 1896, when he was appointed General Passenger Agent G.T.R., with headquarters at Montreal, and May 1, 1900, Passenger Traffic Manager.

E. J. Coyle, who has recently resigned the position of Assistant General Passenger Agent C.P.R., at Vancouver, B.C., was born July 23, 1870, and entered railway service in 1889, since when he has been consecutively, to July, 1892, secretary to General Freight and Passenger Agent, Winnipeg; July, 1892, to Sept. 1, 1896, chief clerk General Passenger Department, Vancouver, B.C.; Sept. 1, 1896, to June 1, 1897, Freight and Passenger Agent, Portland, Ore.; June 1, 1897, to June 19, 1899, District Passenger Agent, Pacific Division; June 19, 1899, to Sept. 8, 1908, Assistant General Passenger Agent, Vancouver, B.C.; entire service with C.P.R. A press report from Vancouver states that he is about to join the steamship company being promoted by J. H. and B. W. Greer, and G. L. Courtenay, the latter two of whom recently resigned from C.P.R. service for that purpose.

D'Arcy Scott, who has been appointed to the Board of Railway Commissioners for Canada, was born Mar. 8, 1872, and was educated at the Ottawa University, subsequently taking a law course at Osgoode Hall, Toronto, and was called to the bar June 7, 1895. In 1896, on his father, Hon. R. W. Scott, giving up practice to enter the Dominion Government, Mr. Scott was appointed C.P.R. solicitor at Ottawa, and was later also appointed solicitor for the Ottawa and New York Ry., and has continued to act in that capacity for the New York Central since that company took over the line. He has had considerable railway practice. He has served two years as a member of the Ottawa City Council, and was elected Mayor Jan. 1, 1908. Among other offices held by him are those of Vice-President of the Union of Canadian Municipalities, and Vice-President of the Ontario Municipal Association.



S. J. McLEAN

Member of the Board of Railway Commissioners.

F. P. Brady, who resigned the position of General Superintendent C.P.R. Lake Superior Division, Sept. 16, was born at Haverhill, N.H., June 22, 1853, and entered railway service 1869, as station baggagemaster Passumpsic Ry., since which he has been consecutively: 1873 to 1880, train dispatcher Northern Rd., at Concord, N.H.; 1880 to 1888, Chief Train Dispatcher Southeastern Ry., at Richford, Vt.; 1888 to 1889, Trainmaster C.P.R.; 1889 to 1898, Assistant Superintendent same road; 1898 to May, 1901, Superintendent same road at Smith's Falls, Ont.; May, 1901, to Sept., 1902, Superintendent districts 10 and 11 same road at Toronto; Sept., 1902, to May, 1903, Superintendent district 19 same road at Fort William, Ont.; June 1, 1903, to Feb., 1904, Assistant General Superintendent Central Division, Winnipeg, Man.; Feb., 1904, to Sept. 16, 1908, General Superintendent Lake Superior Division, C.P.R., North Bay, Ont.

Thomas Greenway, who has been appointed to the Board of Railway Commissioners for Canada, was born in Cornwall, Eng., Mar. 25, 1838, and after coming to Canada at an early age, was educated at the public schools in Stephen tp., Ont. Having served from 1867 as Reeve of Centralia, Ont., he entered political life and unsuccessfully contested South Huron on two occasions, but was subsequently elected to the House of Commons in Feb., 1875, on the unseating of the then member. He declined re-nomination in 1878, when he removed to Manitoba, and was elected to the Manitoba Legislature in 1879. In 1887 he became leader of the Opposition, and on the resignation of the Government in 1888, was entrusted with the formation of a new administration, which remained in power until 1900. He was elected to the House of Commons for Lisgar, Man., in 1904. Under Mr. Greenway's premiership, the Manitoba Government passed various measures in connection with transportation interests, among them being an act respecting the Northern Pacific and Manitoba Ry., and an act providing for the extension of the C.P.R. to the Souris coal fields.

J. G. Sullivan, who has been appointed Assistant Chief Engineer C.P.R. Eastern Lines, Montreal, was born at Bushnell's Basin, N.Y., Jan. 11, 1863, and graduated C.E. at Cornell University, June, 1888. He entered railway service in 1888, his record being: July, 1888, to Mar., 1889, rodman, Great Northern Ry., U.S.; April, 1889, to Aug., 1890, rodman, instrumentman and assistant engineer, Spokane Falls and Northern Ry.; Aug., 1890, to May, 1893, assistant engineer, Great Northern Ry. (U.S.) coast lines; July, 1893, to Feb., 1894, assistant engineer, Alberta Ry. and Coal Co.; July, 1894, to Oct., 1894, section foreman, Northern Pacific Ry.; Oct., 1894, to April, 1895, locating engineer, Butte, Anaconda and Pacific Ry.; April, 1895, to Dec., 1895, division engineer, Kaslo and Slocan Ry.; April, 1895, to Feb., 1901, locating and reconnaissance engineer and engineer in charge construction, Columbia and Western Ry.; Feb., 1901, to Sept., 1905, division engineer, construction department, Western Lines, C.P.R.; Sept., 1905, to Feb., 1907, assistant chief engineer Panama Canal; Feb., 1907, to Sept. 15, 1908, Manager of Construction C.P.R. Eastern Lines, Toronto. He was elected a member of the American Society of Civil Engineers in 1899, and is also a member of the Canadian Society of Civil Engineers.

S. J. McLean, who has been appointed to the Board of Railway Commissioners, was born in Quebec, June 14, 1871, and was educated at private and public schools there, and at Cumberland, Ont., and later, at the Ottawa Collegiate Institute, and from 1890 to 1894 was a student in the Department of Political Science in the University of Toronto. Among the academic positions held by him at various times, are 1894-5, Mackenzie Fellow, University of Toronto; 1895-6, University Fellow in Economics, Columbia University, New York; 1896-7, University Fellow in Economics, Chicago University; 1897-1902, Professor of Economics, and Sociology, University of Arkansas; 1902-06, Associate Professor of Economics Leland-Stanford Jr. University, California; 1906-08, Associate Professor of Political Economy, University of Toronto. He is a B.A. and LL.B. of Toronto University; M.A. of Columbia University, and Ph.D. of Chicago University. He has made a special study of transportation problems in various parts of the world, and has an intimate knowledge of transportation matters, both legislative and administrative, and has had a wide experience in direct contact with business men, railway and labor representatives, both in Canada and the U.S. As a tribute to his insight into such matters he was elected to the chairmanship of the transportation section of the Commonwealth Club of San Francisco. He has been a prolific writer on

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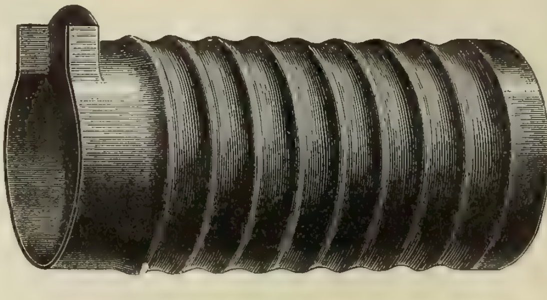

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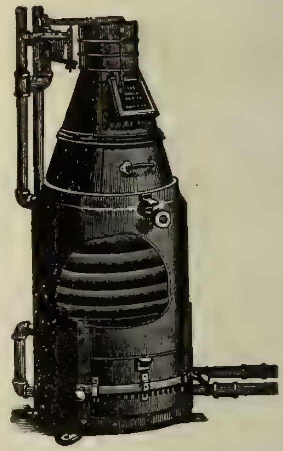

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transportation subjects, having contributed largely to technical periodicals, reviews, etc. From 1898 to 1901 he acted in an advisory capacity to the Department of Railways and Canals, and prepared a special report which was subsequently published by that Department. In 1901 he was appointed special commissioner on Railway Rate Grievances for Canada, and conducted investigations in leading towns throughout the Dominion. The findings of this investigation were embodied in a report which recommended that a Railway Commission be organized for Canada, with power over rates and classification, and that it should have transferred to it the functions hitherto exercised by the Railway Committee of the Privy Council. These recommendations were adopted by the Government, and embodied in the Railway Act of 1903. From 1904 to 1905 he was expert agent of the U.S. Bureau of the Census, and of the Interstate Commerce Commission, and conducted investigations to determine the valuation of railway property in the Western States, and in 1908 he has acted as chairman of conciliation boards to investigate disputes in two mining cases.

Canadian Northern Ry. Construction, Etc.

Canadian Northern Quebec Ry.—W. H. Moore, a director and secretary of the Quebec and Lake St. John Ry., which is worked in connection with the C.N.Q. Ry., returned to Quebec Sept. 4, after having made an inspection of the route of the proposed extension from Roberval, the present terminus on Lake St. John to St. Felicien. He was accompanied on his trip by F. M. Spaidal, General Superintendent; H. K. Wicksteed, Chief Locating Engineer, and Col. Talbot, M.P. In an interview, Mr. Moore said orders would be given immediately to the company's engineering staff to make a survey and prepare plans for the construction of the extension, and that construction would be undertaken and pushed to completion next year.

Canadian Northern Ontario Ry.— Plans were filed with the Department of Railways at Ottawa, Sept. 16, showing the projected new route for the entrance of the railway into the city. The new plans provide for crossing the Rideau River at the back of the Isolation Hospital, and running across the Stewart property to a junction with the G.T.R., near Gladstone Ave. W. H. Moore, Secretary of the company, who was in Ottawa in connection with the filing of the plans, said the only matter to be settled was the entrance to the city. The new plans overcome many of the objections that were previously urged, and if they were approved immediately, there would be no obstacle in the way of having the company's trains running into the city this year. The grading of the line was practically completed from Hawkesbury to the suburbs and tracklaying was well advanced. This would give a direct line from Ottawa to Quebec, with a branch to Montreal.

D. D. Mann, Vice-President, referring to the reports that the company would start construction on its projected line from Toronto to Buffalo, N.Y., during the winter of the present year, is reported to have said recently: "We have the right-of-way and we intend to construct the line some day. It would, however, be premature to make the definite statement that operations would commence in the very near future." The reports with respect to the new line stated that it would have a length of about 100 miles, and would cost about $30,000 a mile. The line would start from a point to the north of Toronto, paralleling the lines of the Power Co., which Mackenzie, Mann & Co. interests own. It is proposed to cross Burlington Beach, and run along the lake shore as near as may be to Port Dalhousie, thence through St. Catharines to or near Niagara Falls.

Canadian Northern Ry.—W. Mackenzie, President C.N.R., recently met some of the chief officers of the G. T. Pacific Ry. at Winnipeg, with a view of discussing the proposal to establish a joint stock yard at St. Boniface.

A contract has been awarded to the Northern Construction Co., Winnipeg, for the construction of a branch through the Viola Dale district to Rapid City.

The company has sent out 25 men from the Pas Mission to carry on the survey of the route to Hudson Bay.

On the company's Goose Lake branch track has been laid for 35 miles, and ties, etc., are being collected at Delisle, preparatory to the resumption of tracklaying.

Ballasting on the line into Regina, Sask., which will give a direct connection to Brandon, Man., is reported to be completed, and a regular service of trains put in operation. The completion of this line will enable the company to run a through service from Winnipeg via Brandon and Regina to Prince Albert, over the old Qu'Appelle, Long Lake and Saskatchewan Ry. On this line between Regina and Lumsden, a distance of 20 miles, a considerable quantity of ballast is being put on in order to bring it up to the requirements of the heavier traffic which will be operated over it. At Lumsden a branch of about eight miles has been completed westerly. On the projected line to connect the old Qu'A., L.L. and S. Ry. with Calgary it is reported that 30 miles have been graded and W. Mackenzie, President, stated, Sept. 4, that he expected 100 miles of track would be laid this year. It is stated that the line to Prince Albert will be followed for about 50 miles with a view of obviating the necessity of opening new branches. Mr. Mackenzie also stated that the C.N.R. was not worrying about a union station at Regina, having already secured rights in the present C.P.R. station, which will eventually be turned into a union station and enlarged as demands arise. The line when constructed will, it is claimed, give a more direct route between Winnipeg and Calgary than the C.P.R. route. Negotiations are said to be in progress between the C.N.R. and the G.T. Pacific Ry., having for their object the provision of a joint station in Saskatoon. It is reported that work on this station will be commenced in the spring. (Sept., pg. 643).

THOMAS GREENWAY,
Member of the Board of Railway Commissioners.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Canadian Westinghouse Co. has issued Instruction Pamphlet T. 5037, containing a description of 12 E.L. locomotive brake equipment

Saxby & Farmer, Ltd., manufacturers of railway signals, safety appliances, etc., whose head office is in London, Eng., with works at Chippenham, Eng., has opened a Canadian branch office at 611 Canadian Express Building, Montreal, in charge of W. M. Punter as Canadian Manager.

The Goldschmidt Thermit Co. is building a machine shop and foundry at the back of its present factory in Jersey City. The building occupies a site, 34 by 90 ft., and will be fitted up for the purpose of handling to better advantage the extensive repair work now being carried on at these works.

F. T. Hyndman, formerly Mechanical Superintendent of the New York, New Haven and Hartford Rd., has been appointed eastern railroad representative of S. F. Bowser & Co., Inc., of Fort Wayne, Ind., manufacturers of oil storage systems. He takes the place of W. A. Pitcher, who met his death in May last, in the Aveline Hotel fire at Fort Wayne.

The Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio, reports having made a large shipment of staybolt iron to the Great Southern of Spain Rd., also to the Australian Government Railways, Brisbane, Australia; the Payta-Piura Ry., Payta, Peru, and the Western Ry. of Havana, Cuba. The company has a nice order on hand for a large tonnage of Falls Hollow iron for the Ferro Carril de Entre Rios Ry., of Argentine, also for the North Brabant German Ry., Gennep, Holland. The 10 locomotives recently ordered by the International and Great Northern Rd. from the American Locomotive Co. are to be equipped throughout with Falls Hollow bolts, also the six locomotives ordered from the Baldwin Locomotive Works by the Iowa Central Ry., and one locomotive ordered by the Mexican Central Ry.

The Continental Iron Works, Brooklyn, New York, has issued the seventh edition of "Morison Suspension Furnaces for Internal Furnace Boilers." The book deals with the use of the Morison suspension furnaces, of which the Continental Iron Works is the sole manufacturer in the U.S., in connection with land boilers only, in contradistinction to the application of Morison suspension furnaces for marine purposes. It is a finely compiled and printed volume of nearly 70 pages, bound in a serviceable cover. There is a fund of valuable data, with numerous illustrations, including a number of boilers using Morison suspension furnaces, together with details of design and construction, tables of pressure and thickness and rules for calculating same. The designs shown are for land boilers ranging from 50 to 300 h.p., and are intended to meet general requirements, it being explained that where boilers are designed to work under other than normal conditions, the designs are offered by way of suggestion only. A form of specification for internal furnace tubular boilers, which accompanies the designs, should prove an important aid. In the latter part of the book is a partial list of installations of internal furnace boilers

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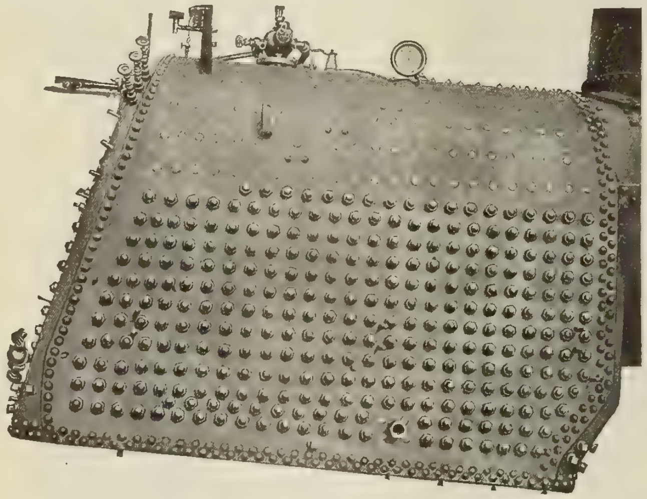

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fitted with Morison suspension furnaces, many of which are repeat orders. This is followed by illustrations and full information regarding the Morison patent furnace fronts and doors for economical and rapid firing, and which are also made only by the Continental Iron Works. Engineers, architects and boiler manufacturers will find this book of great assistance to them in the design and lay out of steam power plants.

National Transcontinental Railway.

Construction is being proceeded with rapidly on the sections of the line in New Brunswick. The Corbet-Floesch Co., which has the contract under the G.T. Pacific Ry. Co. for the line from Moncton to within six miles of Chipman, a distance of 50 miles, at the end of Aug. had 18 miles graded at the Moncton end and also a branch of six miles to a ballast pit. Track has been laid on this branch, which runs from the main line of the Intercolonial Ry. and crosses the N.T. Ry. to get to the ballast pit. The company started to lay track on the main line at Catamount, 11 miles west of Moncton, towards Canaan River, and started early in Sept. to lay track easterly from Catamount towards Moncton. It is expected that 27 miles of main line track would be laid on this 50-mile contract this fall. On the eastern end of their section the contractors have at work two standard gauge locomotives, 12 narrow gauge locomotives, five steam shovels, 20 Hart convertible cars and 10 flat cars, and at the Chipman end there are three steam shovels, one standard gauge locomotive, 10 narrow gauge locomotives, six Rodger ballast cars, and five flat cars. At the Chipman end of the line five miles of grading has been completed. Altogether there are about 700 men at work, and the contractors expect to have the whole of the grading completed during 1909.

The G.T. Pacific Ry., which secured the contract for the construction of 150 miles of the line known as the Abitibi section, is said to be taking steps to cancel the subcontract made with the Reynolds Construction Co. The contractors have done a good deal of preliminary work, but it is said they have failed to make adequate progress, and it is reported that the G.T. P.R. Co. will either secure another subcontractor, or go ahead with the work itself.

The Commissioners have awarded contracts for the construction of line as follows:

District C, from Weymontachene, Que., 196.38 miles west of the north abutment of the Quebec bridge, westerly for about 107 miles; and from a point 107 miles west of Weymontachene, Que., westerly to the end of the G.T. Pacific Ry. Co.'s contract, about 114.97 miles; to be completed by Dec. 31, 1910; to Macdonell and O'Brien, Montreal; and:

Districts E and F, from a point at the western end of Fauquier Bros.' contract north of Lake Nipigon, Ont., westerly to Dog Lake, about 126 miles, to be completed by Sept. 1, 1910; and,

District F, from Dog Lake, Ont., to a point west of what is known as Peninsula Crossing, by alternative routes, about 23.76 miles by the northerly route and 24.13 miles by the southerly route, the selection of the route to be at the option of the Commissioners; to be completed by Sept. 1, 1909; to O'Brien and McDougall, Ottawa.

The Commissioners received tenders to Sept. 28, for the remaining two sections of the Eastern Division of the line. These are: Districts D and E.—From the western end of the Abitibi contract of Fauquier Bros., westerly 104.24 miles. District E.—From about 60 miles west of the easterly boundary of District E easterly to the end of Fauquier Bros.' contract north of Lake Nipigon, a distance of about 100 miles. The work is to be completed by Dec. 31, 1910. The Commissioners are also asking for tenders, to be sent in by Oct. 8, for the construction of locomotive shops at Winnipeg, and for the filling required for the preparation of the site for the shops

The shops, for the construction of which tenders will be received Oct. 8, are to be located in Springfield municipality, 6 miles east of Winnipeg, and close to the C.P.R. Molson cut-off and a C.N.R. branch line. The site is an admirable one and is on open and level ground. The plans are so arranged as to secure the most rapid and economical handling of trains, thus obtaining the maximum efficiency from rolling stock and motive power. The specifications divide the work into sections, comprising the preparation of the site, levelling the ground to raise it to track level, foundation and concrete work, steel work, carpenter work, sheet metal, painting, glazing and plumbing. The locomotive shop will be the first structure to be undertaken, and will be divided into three departments. The tank shop for the construction of the parts of locomotives or cars, made of sheet iron or steel, will be 184 by 95 ft.; the boiler shop, 184 by 110 ft., and the machine tool and erecting shop, 615 by 174 ft. In the erecting shop there will be 26 engine pits, and these will be served by two transverse tracks, one of which will be continued through the boiler and tank shops. The total dimensions of the building will be 823 by 174 ft. The frame of the building will be of the self-supporting steel type on solid concrete foundation, the main flooring being also of concrete, while walls will be of best quality brick. The roof will be on the "sawtooth" design, with all skylights and ventilators of copper, planned to ensure a maximum of light and ventilation. The erecting shop will be equipped with one girder crane of 120 tons capacity, and one of 10 tons capacity. A press report says that the total cost of the construction and equipment of the shops and yards will be $5,000,000, of which the National Transcontinental Ry. Commissioners pay about $1,500,000, the G.T. Pacific Ry. being responsible for the remainder.

GRAND TRUNK PACIFIC RY.

A regular train service was placed in operation Sept. 21 from Winnipeg to Wainwright, Sask., at the crossing of the Battle River, a distance of 666 miles. Several general officers of the company from Montreal and A. W. Smithers, Vice-President G.T.R., London, Eng., were present on the occasion. The party left Montreal Sept. 11 on a special train, travelling to Winnipeg, via Chicago. After travelling over the completed line, the party went over the line under construction to Edmonton, Alta., and a portion of the route westerly. They subsequently went to Prince Rupert to inspect the work in progress there. A press report states that the resignation of officials at Winnipeg is due "to the deplorable condition of the new system which has been rushed through for political reasons. In many places the track sinks as rapidly as constructed for want of ballast and proper construction." This item appears only in the newspapers of one political party, and no doubt exaggerates for political reasons the difficulties of getting a newly constructed line into operation. At Wainwright a 12-stall roundhouse is under construction, and a large force of men has been at work since Sept. 1, grading and laying out the yards.

In regard to the progress of construction west of Edmonton, it is reported that the contractors have over 3,500 men at work, the larger number being engaged between Edmonton and the Pembina River, a distance of 65 miles. It is expected that this portion of the line will be graded and ready for tracklaying by winter. The construction gangs, as they are closing up the work on the sections between Battle River and Edmonton, are moving west of the Pembina River. Only a short stretch of 15 miles in the Beaver Hills was reported Sept 15 to be unfinished. This is expected to be finished by Oct. 15.

At the Prince Rupert end, the contractors state good progress is being made. Grading on the first 50 miles is reported to be well under way, and work is being opened out on the second 50 miles as fast as supplies can be got in. It is expected that a further section of 100 miles easterly from the summit of the Yellowhead Pass, will be let shortly This would leave a further distance of about 400 miles to be let.

Collingwood Schreiber, Consulting Engineer to the Department of Railways, accompanied by B. B. Kellihe, Chief Engineer G.T.P.R., was at Prince Rupert Sept. 5, and inspected the route as far as Hazleton. Some difficulties, it appears, have arisen in the way of securing the right-of-way, and the straightening of these out was one of the reasons for Mr. Schreiber's inspection. (Sept., pg. 637)

Proposed Regulations for Railways.

Following is a draft of regulations which the Board of Railway Commissioners propose to adopt, and which has been sent to railway companies under its jurisdiction. The matter will be discussed at the meeting of the Board which opens at Ottawa Oct. 6.

Every freight car of railway companies operating a railway by steam power, built after Dec. 1, 1908, shall be equipped with operating levers on both sides of the ends of every such car, and every such car shall be equipped with air brakes.

No freight train shall be made up or allowed to proceed upon its journey unless at least three-quarters of the cars composing such train have air brakes in good working order.

The number of cars to be drawn in freight trains shall be left entirely to the judgment of the operating officials of such railway companies; in all cases, however, in which it may be found necessary to double-head, the leading engine shall control the train.

Every road locomotive of such railway companies shall be equipped with steps and hand-holds on both sides of and at the rear ends of tenders, such steps to conform to the same distance from the top of the rail as those on the front end of the tender; foot-rests shall be provided on the pilots of every such road locomotive, sufficiently wide for a man to stand on; every switching or yard locomotive shall be equipped with foot-boards and headlights on the front and rear ends of the engine and tender, such foot-boards to be not less than ten inches wide; where such foot-boards are cut in the centre, the space so cut off shall be covered with an arched iron belt, and foot-boards and headlights shall be placed on the rear end of the tender of every road locomotive used for switching services temporarily or otherwise.

The number that shall comprise the switching engine crews of such railway companies shall be left entirely to the judgment of the operating officials of such companies; on the main lines of such companies light engines shall not be run a distance greater than 25 miles in any one direction without a conductor, in addition to the engineer and the fireman, and on the branch lines, the operating officials of such companies shall determine the necessity of requiring conductors on the light engines.

The passenger trains of such companies shall carry at least one brakeman of not

(Continued on page 729.)

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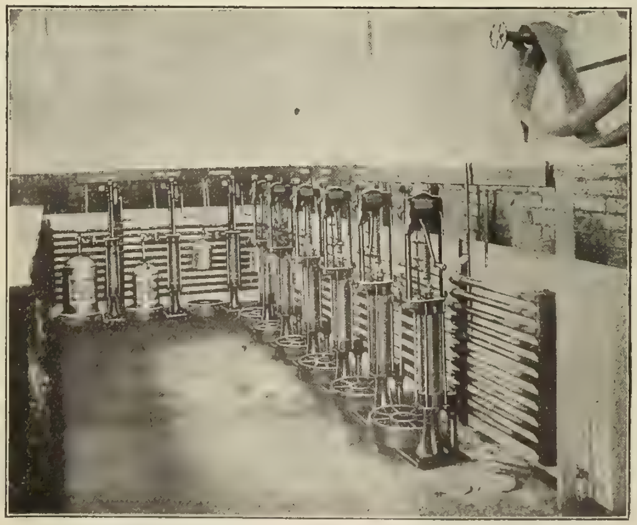

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An order for the winding up of the Atikokan Iron Co. of Port Arthur, Ont., has been granted on the petition of Mackenzie, Mann & Co., J. D. Fraser, Port Arthur, being appointed provisional liquidator.

A board of conciliation is investigating questions affecting the conditions of employment of carmen on the Quebec and Lake St. John Ry. E. A. Evans, General Manager Quebec Ry., Light and Power Co., is representing the company and A. Chartesin the men. A similar board is investigating the conditions of employment of locomotive engineers on the Canadian Northern Ontario Ry., the Canadian Northern Quebec Ry., and the Quebec and Lake St. John Ry., with Judge Gunn, Ottawa, chairman; F. H. Richardson, Toronto, representing the companies, and J. H. Hall, on behalf of the engineers. The first sitting of the board was held at Ottawa Sept. 17.

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Proposed Regulations for Railways.

(Continued from page 725)

less than one year's experience as a brakeman, and shall also carry a baggageman; provided that passenger trains consisting of eight or more cars be supplied with at least one additional brakeman.

Every locomotive engineer of such companies must have at least one year's continuous experience as a fireman, pass a satisfactory examination in regard to the proper care of locomotives, the handling of air brakes, and train rules and regulations; be at least 21 years of age, and undergo an eye and ear test, before a competent operating railway official, before being eligible for appointment as such engineer.

Every conductor of such companies must have at least one year's experience as brakeman, and be at least 21 years of age before being eligible for appointment as such.

The telegraph operators of such companies shall be at least 18 years of age, able to write a legible hand, and to send and receive messages at the rate of not less than 20 words a minute, and also be thoroughly familiar with and required to pass an examination upon train rules and the practical working of telegraph offices, before a competent operating railway official, before being put in charge of telegraph offices.

Every employe of such railway companies engaged in operating trains shall be required to undergo a color test before a competent operating railway official, before being employed by the company for such purpose.

Such railway companies shall strictly conform to the rules and regulations approved by the Master Car Builders' Association, governing the loading of lumber, logs, and stone in open cars, and the loading and carrying of structural material, plates, rails, and girders. No material of any kind shall be carried upon the tops of cars.

All open drains crossing the yards of such companies shall be covered; semaphore and signal wires shall be carried above the ground in pipes; semaphores and switches, except switch stands, and any new buildings erected, shall be placed 6 ft. from the rail; and water stand supply pipes shall be fastened parallel with the main line, and enginemen required to see that this is done when through using such pipes.

Crippled cars shall not be allowed behind the van in freight trains, cars containing perishable freight or live stock, crippled in minor respects, as for example, by a broken coupler, a coupler pulled out entirely or pulled out so as to destroy its usefulness to draw cars, draft timbers which allow the coupler to fall below the standard position, making it impracticable to couple with the freight cars without chaining, shall be chained up ahead of the car and taken to the first terminal for repairs, when, in the opinion of the conductors of such trains, it is safe to haul such cars on chains. In no case are more than two such cars to be handled in any one train, except where more of such disabled cars have been damaged through wrecks or such causes, a special pick-up train is sent out to bring them in; crippled cars to be cleared from the main line at the earliest possible moment.

A crippled car shall include one with any of the following defects, namely: A broken coupler. A coupler pulled out entirely, or so pulled out as to destroy its usefulness in drawing a car. Draft timbers, that is, where the draft timbers have so spread or fallen down as to permit the coupler to fall below the standard position, rendering it impracticable to be coupled with other cars unless chained, besides making it unsafe to handle. A cracked wheel. A chipped flange over 2½ inches. A broken wheel flange. A bent axle or journal. A broken arch bar or truck straps.

Such railway companies or their officers, agents, or employes, or any of them, disobeying or failing to comply with the provisions of these regulations, shall be liable to a penalty of $50 for every such disobedience or failure or breach.

Railway Finance, Meetings, etc.

Alberta Ry. and Irrigation Co.—Approximate net profits, exclusive of land sales for July, $26,721, against $31,301 for July, 1907. Approximate traffic receipts for Aug., $24,645, against $18,745 for Aug., 1907.

Atlantic and Lake Superior—Baie des Chaleurs Ry—The Exchequer Court received tenders for the purchase of these lines Sept. 10, and accepted the only one offered, viz., that of the Royal Trust Co. of Montreal, $1,050,000, for the Baie des Chaleurs Ry., and $350,000 for the Atlantic and Lake Superior Ry. The latter company took over the former, and constructed an extension, so that in order to comply with all legal requirements and to prevent future complications the line was sold in two separate sections. The order of court accepting the tenders requires the Royal Trust Co. to give a bond for $600,000 as a protection against a claim by the Northern Banking Co. of England, which has a claim that will come up for hearing on appeal at the next sitting of the Supreme Court of Canada.

Canada Atlantic Ry.—The appeal of H. L. Sprague against the judgment of the Ontario High Court, dismissing his action against J. R. Booth, whereby he claimed $2,250,000 on a contract made Jan., 1902, in connection with the transfer of J. R. Booth's interest in the C.A.R. for $10,000,000, was commenced in the Court of Appeal Sept. 21. The claim is for $250,000 paid as deposit, and $2,000,000 as damages for noncompletion of contract.

Canadian Pacific Ry.—After the annual meeting of shareholders, which will be held at Montreal Oct. 7, a special meeting will be held to approve an increase of the present ordinary capital stock of the company by an amount not exceeding $50,000,000, such increase of stock to be issued from time to time according to the requirements of the company as may be determined by the directors.

Caraquet Ry.—The annual meeting of the company was held recently at Bathurst, N.B. The report showed an increase of earnings over any previous year. The lease of the Gulf Shore Ry. was confirmed, and the following directors re-elected for the current year: R. H. Bowes, W. D. Northgrave, A. G. Ross, E. D. Stockdall, J. J. Warren, J. Webster and J. H. Whitehead.

Cuba Ry.—This company, of which Sir Wm. Van Horne is President, shows gross earnings for the year ended June 30 of $2,039,467, against $1,953,309 for 1906-7, and $1,619,081 for 1905-6. The net income is $355,424, against $332,424 in 1906-7, and $287,860 in 1905-6. The President in his report says the year was an unfavorable one in Cuba owing to the serious shortage in the sugar crop, resulting from the drought of a year ago. There was a shortage of more than 300,000 tons as compared with the preceding crop.

Dominion Atlantic Ry.—Gross earnings for July, $143,700, against $159,426 for July, 1907. Total earnings for 7 months ended July 31, $612,400, against $617,187 for same period 1907.

Grand Trunk Ry.—The half-yearly meeting of shareholders will be held in London, Eng., Oct. 8.

Grand Trunk Pacific Ry.—The annual meeting of shareholders, called to be held at Montreal Sept. 15, was adjourned to a future and unfixed date. The company does not make its annual report public as the line is under construction only.

Klondike Mines Ry.—The annual meeting was held at Ottawa Sept. 7. Following are officers and directors for the current year: President, H. B. McGiverin; Vice-President, W. C. Greig; Secretary, A. Haydon; other directors: C. G. Kekewich, J. Latta.

London and Port Stanley Ry.—The earnings of this line, operated under lease by the Pere Marquette Rd., are reported to show a falling off for the year ended June 30, and the estimate of the percentage payable to the London, Ont., city council, is placed by the finance committee at considerably less than for the year 1906-07.

Massawippi Valley Ry.—The annual meeting of shareholders was held Sept. 2. Following are officers and directors for the current year: President, J. G. Foster, Derby Line, Vt.; Vice-President, C. W. Case, Sherbrooke, Que.; Secretary, S. Stevens, Rock Island, Que.; Treasurer, John H. Williams, Rock Island, Que.; directors: J. W. Dunklee, Boston, Mass.; Jas. H. Williams, Bellows Falls, Vt.; C. H. Kathan, Rock Island, Que.; C. D. White, F. Grundy, F. N. McCrea, Sherbrooke, Que.; H. N. Turner, St. Johnsbury, Vt.

The North Shore Ry. Co., which was organized last year to take over the Beersville Ry. in New Brunswick, is controlled in New York, the directors being: H. Von Hagen, President; I. Purdy; W. G. Kennedy, Secretary; Marvin Seeley, Treasurer, all of New York, and Dr. M. L. Keith, of Moncton, N.B., who is also General Manager. The North Shore Ry. Co. is operating the Beersville Ry., which runs from Adamsville Jct., about 30 miles west of Moncton, to the Northern Coal Co.'s mine, about 8 miles, with a 3 mile spur to Mount Carlyle, where another coal mine is to be reopened. Practically the same interests control the Bay of Fundy Mining Co., which is carrying on copper mining at Mount Vernon, Albert County, N.B.

Quebec and Lake St. John Ry.—Gross receipts for Aug., $68,860.76, against $68,753.23 for Aug., 1907. Total receipts for 8 months ended Aug. 31, $328,996.78, against $336,862.87 for the same period 1907. The mileage operated during Aug. was 286.5, against 240 miles in Aug., 1907.

Quebec Bridge and Ry. Co.—The annual general meeting of the shareholders was called for Sept. 1, but the meeting did not take place, as it was expected that the Dominion Government would take possession of the assets, franchises, etc., of the company on that date.

Rolling Stock Reports.—The Secretary of the Board of Railway Commissioners has issued a circular stating that the board has decided to only require from the railway companies subject to its jurisdiction a half-yearly statement of locomotive and car equipment, such statement to be sent on June 30 and Dec. 31 of each year to J. Ogilvie, Inspector of Railway Equipment and Safety Appliances, Ottawa. This will not interfere with the monthly report giving the number of cars held for repairs on each company's lines.

Speaking at Niagara Falls, Ont., Sept. 15, Sir Wilfrid Laurier said: "There are some people who think we should have a two-cent fare by legislation. We think that is not possible yet, because the conditions of Canada differ materially from those in the Province of Ontario and other Provinces, and we have given control of all those affairs to the Railway Commission. That Commission has taken steps measurably towards giving a two-cent fare."

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TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Algoma Central and Hudson Bay Ry.—W. Mills, heretofore car foreman in charge of the company's car shops, has been appointed Master Car Builder, which position has been vacant since 1903, when W. Hacking left to become general car foreman of the Chicago Great Western Ry. at Oelwein, Iowa. Office, Sault Ste. Marie, Ont.

Canadian Northern Ontario Ry.—See Canadian Northern Ry.

Canadian Northern Quebec Ry.—I. L. Boomer, Trainmaster, Montreal, having resigned, the position will not be filled, at least for the present.

See Canadian Northern Ry.

Canadian Northern Ry.—W. J. Pace, who was formerly in the company's service, but resigned to become Commissioner of Works for the City of Edmonton, has been appointed Trainmaster, division 3. Office, Dauphin, Man.

I. L. Boomer, heretofore Trainmaster, C.N.Q. Ry., has been appointed train dispatcher, C.N.R., at Rainy River, Ont.

J. D. Morton, chief accountant, has also been appointed General Auditor, Canadian Northern Ontario Ry., Canadian Northern Quebec Ry., Quebec and Lake St. John Ry., and Halifax and Southwestern Ry. Office, Toronto.

Canadian Pacific Ry.—The title of W. A. Cooper, heretofore Superintendent Sleeping, Dining and Parlor Cars and News Service, has been changed to General Superintendent Sleeping, Dining and Parlor Cars and News Service. Office, Montreal.

The sleeping, dining and parlor car service on the Eastern Lines has been divided as follows: District 1, lines east of Toronto and Sudbury; district 2, lines Toronto to Windsor, Sault Ste. Marie and Port Arthur, inclusive. H. F. Matthews, heretofore Assistant Superintendent, Eastern Lines, has been appointed Assistant General Superintendent districts 1 and 2. Office, Montreal. S. Wertheim, heretofore agent, Toronto, has been appointed Superintendent, district 2. Office, Toronto.

The sleeping, dining and parlor car service on Western Lines has been divided as follows: District 3, Central Division lines. District 4, Western Division lines, including Spokane, Wash. District 5, Pacific Division lines, including Seattle, Wash. W. Bell, heretofore Assistant Superintendent Western Lines, has been appointed Assistant General Superintendent districts 3, 4 and 5. Office, Winnipeg. N. F. Paterson, heretofore agent, Winnipeg, has been appointed Superintendent district 3. Office, Winnipeg. S. C. Sykes, heretofore District Superintendent, Pacific Division, Vancouver, B.C., has been appointed Superintendent, district 4. Office, Calgary, Alta. H. R. Bain, heretofore agent, Calgary, Alta., has been appointed Superintendent, district 5. Office, Vancouver, B.C.

J. G. Sullivan, heretofore Manager of Construction, Eastern Lines, Toronto, has been appointed Assistant Chief Engineer, Eastern Lines, with headquarters at Montreal, succeeding F. P. Gutelius. Mr. Sullivan will also continue to perform the duties of Manager of Construction, his Toronto staff having been removed to Montreal.

J. Doig, heretofore Assistant Paymaster, Montreal, has been appointed Paymaster there, vice H. W. Sweeny, promoted.

H. Esdaile has been appointed Assistant Paymaster at Montreal, vice J. Doig, promoted.

J. S. Ewart, K.C., has been temporarily appointed local solicitor at Ottawa, succeeding D'Arcy Scott, appointed Assistant Chief Railway Commissioner.

R. L. Thompson, heretofore General Agent, Passenger Department, Cincinnati, Ohio, has been appointed District Passenger Agent, Ontario Division, vice C. B. Foster, promoted. Office, Toronto.

A. Binns, heretofore locomotive engineer, has been appointed acting road foreman, district 2, Ontario Division, during the absence on leave of L. G. Roblin, road foreman.

F. P. Gutelius, heretofore Assistant Chief Engineer, Eastern Lines, Montreal, has been appointed General Superintendent, Lake Superior Division, North Bay, Ont., vice F. P. Brady, resigned.

H. W. Sweeny, heretofore Paymaster at Montreal, has been appointed Local Treasurer at Winnipeg, vice H. B. Bridges, who has retired from the service.

In our July issue we announced the appointment of R. W. Drew as District Freight Agent at Saskatoon, Sask., which went into effect Aug. 1. The circular, which was delayed in reaching us, states that he has been appointed District and Travelling Freight Agent. His territory consists of the Last Mountain, Lanigan and Saskatoon sections, also of freight traffic to and from stations on connecting lines in Saskatchewan and Alberta, north of C.P.R. main line and east of Edmonton.

C. B. Foster, heretofore District Passenger Agent Ontario Division, Toronto, has been appointed Assistant General Passenger Agent, Pacific Division, vice E. J. Coyle, resigned. Office, Vancouver, B.C.

F. H. Clendenning has been appointed City Freight Agent, Victoria, B.C., vice G. L. Courtney, resigned. He has also been appointed District Freight Agent, Esquimalt and Nanaimo Ry.

T. F. Madden, heretofore cashier at New York City, has been appointed Travelling Passenger Agent for the Atlantic seaboard States south of New York, vice G. H. Griffin, transferred. Headquarters, New York.

R. A. Burford, heretofore City Passenger Agent, Buffalo, N.Y., has been appointed cashier at New York City office, vice T. F. Madden, transferred.

G. H. Griffin, heretofore Travelling Passenger Agent, Atlantic seaboard States south of New York, has been appointed City Passenger Agent, Buffalo, N.Y., vice R. A. Burford, transferred.

A. J. Blaisdell, heretofore City Passenger Agent, St. Louis, Mo., has been appointed General Agent, Passenger Department, Cincinnati, O., vice R. L. Thompson, promoted. His territory includes the States of Ohio (except the portion south from Sandusky to Bucyrus, thence east through Mansfield, Canton, Alliance and Youngstown, to the Pennsylvania State line and north thereof), Indiana, Kentucky, Tennessee, Alabama, Mississippi and Louisiana.

T. J. Barnes, Jr., heretofore Travelling Passenger Agent, Atlantic Steamship Line, Chicago, Ill., has been appointed City Passenger and Ticket Agent, St. Louis, Mo., vice A. J. Blaisdell, promoted.

Esquimalt and Nanaimo Ry.—F. H. Clendenning has been appointed District Freight Agent, Victoria, B.C., vice G. L. Courtney, resigned. He has also been appointed C.P.R. City Freight Agent at Victoria.

Grand Trunk Pacific Ry.—G. C. Dunn, who has been appointed District Engineer at St. John, N.B., as announced in our last issue, has under his jurisdiction all the territory east of the Quebec Provincial boundary. His work is of an inspecting character on the line being built by the National Transcontinental Ry. Commission from Moncton westward, and which is to be operated by the G.T.P.R. Co.

W. H. Ardley, acting General Auditor, G.T.R., has also been appointed acting General Auditor, G.T. Pacific Ry., N. J. Power having been granted leave of absence. Office, Montreal.

In announcing the appointment of D. W. Steeper as acting Trainmaster, Lake Superior Division, in our Sept. issue, the headquarters were stated as Westport instead of Westfort.

A. E. Duff, heretofore General Agent, G.T.R. Passenger Department, Winnipeg, has also been appointed District Passenger Agent for G.T.P.R. lines west of Lake Superior. Office at 260 Portage Ave., Winnipeg.

In our last issue it was mentioned that a press report stated that S. Smith had been appointed Superintendent of Construction at Portage la Prairie, Man., succeeding Otis Weeks, resigned. Just after the issue had gone to press we were officially advised that the report was incorrect, as no successor to Mr. Weeks had been appointed. The latter's position was Track Engineer.

Grand Trunk Ry.—W. H. Ardley, heretofore Auditor of Disbursements, has been appointed acting General Auditor, N. J. Power having been granted leave of absence. Office, Montreal.

J. M. Rosevear, heretofore chief clerk, General Auditor's office, has been appointed Auditor of Disbursements, vice W. H. Ardley, promoted. Office, Montreal.

The following agents have been appointed: Actonvale, Que., J. O. Laroche, 2nd; Britannia Mills, Que., H. M. Houde, 2nd; Aston, Que., J. H. Deshaies, 3rd; Kinmount, Ont., J. M. Rutherford, acting, 10th; Trout Creek, Ont., W. J. Cole, 12th; Renton, Ont., E. Y. King, 19th; Greenfield, Ont., W. A. Knowles, 30th; Casselman, Ont., F. O. Parent, 30th; Caldwell, Ont,. A. Hughes, 31st; Barry's Bay, Ont., W. A. Graham, 31st; Rainy Lake, Ont., W. H. Armour, 32nd; Ravenworth, Ont., L. G. LaBatt, 32nd.

Halifax and Southwestern Ry.—See Canadian Northern Ry.

Intercolonial Ry.—M. McLearn, one of the train dispatchers at Truro, N.S., is acting as Chief Dispatcher there in place of J. T. Hallisey, who has been appointed acting Superintendent.

We are officially advised that the position of Inspector of Locomotives and Cars, which J. Stewart resigned recently, "is not being filled."

A. H. Somers has been appointed acting Trackmaster, Point du Chene to St. John, N.B., in place of G. Seaman, who is on leave of absence owing to illness. Office, Moncton, N.B.

Lake Superior Corporation. — In consequence of the appointment of W. C. Franz as General Manager, as announced in our last issue, the position of acting Manager has been abolished, and J. S. Wynn, who has occupied that position, has resumed his duties as General Auditor. Among the subsidiary companies of the Lake Superior Corporation are the Algoma Central Ry. and Steamship Line, The Manitoulin and North Shore Ry., The International Transit Co., The Trans-St. Mary's Traction Co., and The Algoma Steel Co.

New Brunswick Coal and Ry. Co.—A. Sherwood, General Manager Salisbury and Harvey Ry., has also been appointed Manager, N.B.C. and R. Co., vice W. C. Hunter, resigned. Office, Norton, N.B.

Quebec and Lake St. John Ry.—See Canadian Northern Ry.

Canadian Express Co.— P. A. Paterson has been appointed Superintendent of Central and Eastern Divisions, at Montreal, vice N. J. Ross, who has been appointed Superintendent of territory covered by the company on the G.T. Pacific Ry. in the Northwest Provinces, with headquarters at Winnipeg.

W. P. Stericker has been appointed Claims Agent at Montreal, vice P. A. Paterson, acting Claims Agent, transferred.

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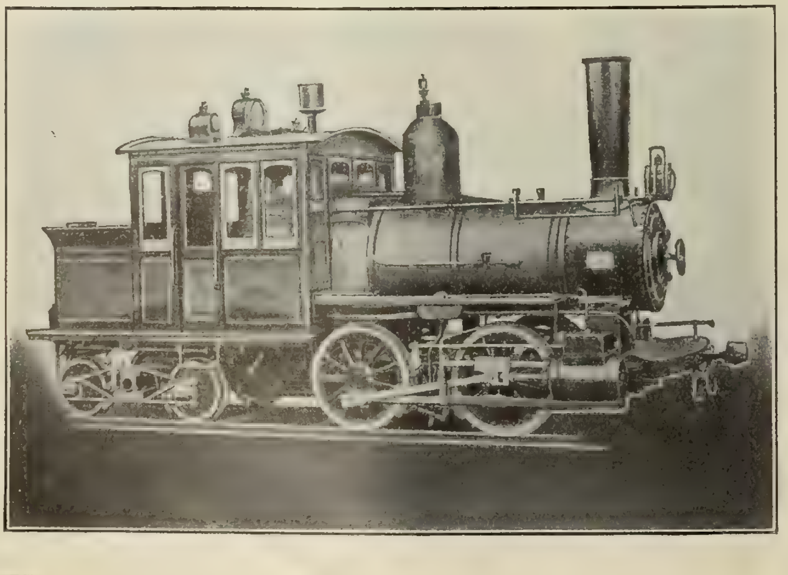

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General Passenger Agents' Association.

The 53rd annual convention of the American Association of General Passenger and Ticket Agents was held in Toronto Sept. 22 and 23, some 150 members, with a large number of ladies, being present. The President of the Association, O. H. Taylor, Passenger Traffic Manager of the Metropolitan Steamship Co., New York, occupying the chair. At the opening session Hon. G. P. Graham, Minister of Railways and Canals; Hon. J. J. Foy, Attorney-General of Ontario, and the Mayor of Toronto, spoke, welcoming the members.

Considerable time was devoted to matters connected with the use of the Association's new ticket paper, on which there was a report from the standing committee and also a report from the President, outlining the embarrassments which had been encountered since the Washington meeting. It was finally decided that the rules governing the handling of the safety paper by licensed printers be adhered to.

The following reports were received: Of lines that have discontinued or will discontinue the practice of bulletining tickets lost by passengers; Of lines that have adopted or will adopt the form of printed matter on coupons of interline tickets. Of lines that have adopted or will adopt the practice of numbering tickets on the reverse side. From standing joint committee of the American Association of General Passenger and Ticket Agents and the Association of American Railway Accounting Officers. From committee on standard ticket contracts.

A proposition to place the Association's star trademark on the back instead of on the face of Association ticket paper was agreed to and it was decided to adopt drab Association ticket paper for round trip tickets. The question of age limits for children entitled to half fares was dropped.

S. Moody, General Passenger Agent Pennsylvania Lines west of Pittsburg, read a paper in which, in view of the 2c. fare legislation in many of the States, he opposed the granting of reduced fares for meetings of societies, organizations, etc. C. F. Bielman, Traffic Manager White Star Line, Detroit, Mich., read a paper on "Passenger-carrying lake and river lines of North America."

Reports were received from co-operating associations, including the Association of American Railway Accounting Officers, American Association of General Baggage Agents, American Association of Travelling Passenger Agents, International Association of Ticket Agents, and the

CANADIAN TICKET AGENTS' ASSOCIATION.

W. Jackson, C.P.R. ticket agent, Clinton, Ont., representing the Canadian Ticket Agents' Association, addressed the meeting, his remarks being very warmly welcomed. He said:

I am called upon to-day to appear before you as a representative of the Canadian Ticket Agents' Association, to extend to you our compliments and best wishes, and to thank you for the honor and privilege of being present upon this occasion. I am quite sure that I voice the sentiments, not only of the members of our own Association, but of every one connected with the transportation interests of this province, when I say that we all appreciate to the fullest extent your visit to this country, and more especially your convening in the city of Toronto—a city of which we are proud, and a city which stands at the head of the great railway systems of Western Ontario.

It is also a great pleasure to have you with us upon this occasion, because it gives us all an opportunity of demonstrating to you the great progress that is going on in this country at the present time, a progress in which you are all more or less directly interested. We are on the eve of one of the greatest developments that any country has ever seen, a development that means a great deal to many transportation companies on this continent. Twenty-five years ago our country was at a standstill, and making no progress. We were looked upon as a nation of agriculturists. Of course all our provinces are more or less agricultural. With the development of our farms we have built railways, established banks and opened up trading houses, all of which are most necessary. After a few years we discovered that we were lacking in big cities in consuming centres. We found out that our sons and daughters, born on the farm, would not all be farmers. Some would not because it did not suit them, others would not because they saw greater opportunities elsewhere. The result was that Canadians went to the United States by the thousand. Most of them went to the cities where they had all kinds of opportunities to engage in business. This continued for some years. In 1904 there were 1,200,000 persons of Canadian birth living in your country, most of these people being lost to us because we had not the towns or factories; in other words, the inducements and the opportunities. But to-day the tied has turned. We have toed the mark and taken stock of ourselves. What do we find? Not only that nature has fitted us to be a great agricultural nation, but that our mines, our forests, our streams and our waterfalls destine us to stand in the front ranks of the manufacturing countries of the world; that here, within our own borders, we have all the raw material for the world's greatest industries; the necessary industrial opportunities for our own people. The American people recognized this state of affairs even before we did, and for the past two or three years they have been sending us thousands of settlers to help fill up our great Northwest. One of our leading statesmen has said that the 20th century belongs to Canada, and this statement appears to be coming true. In 1900 we received about 24,000 settlers; in 1905, 147,000, and in 1907, 250,000. An eminent railway authority, in the person of J. J. Hill, has predicted that in 25 years there will be 40,000,000 people settled west of Lake Superior.

Take again the commerce between our two countries. Last year we purchased from the United States $222,000,000 of goods, out of total imports amounting to $372,000,000. Your imports from this country amounted to $80,000,000; all of which shows a great development. Then again to get a little nearer home, take our wonderful progress in connection with our railway and steamship systems. A few years ago a steamship taking 12 days to cross the Atlantic was quite satisfactory to many people, but to-day the change has come, and the swiftest and best are none too good. A few years ago our railways could carry a large proportion of their passengers in coaches attached to freight trains, but to-day we require to have the best, and even our branch lines are supplied with parlor and café cars. All this is in keeping with our progress and will give you some idea of what to expect in the future.

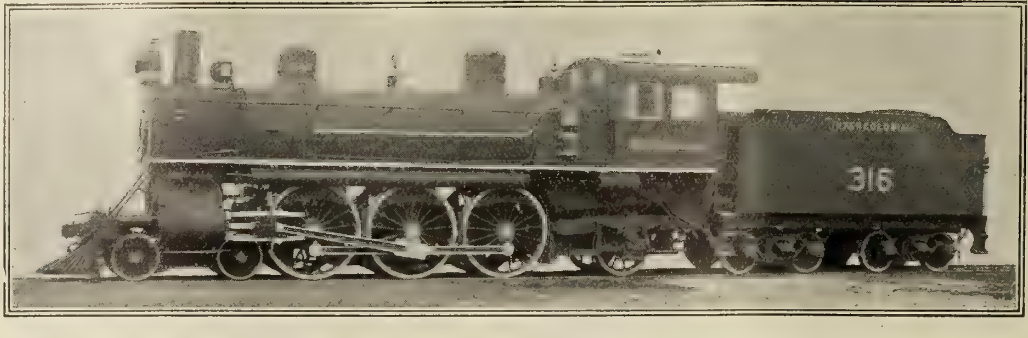
I have to-day the honor of representing the Canadian Ticket Agents' Association, an association which was formed 22 years ago. During that length of time I have had the pleasure and satisfaction of attending every meeting, forming friendships and associations which I hope will not be severed for many years to come. We have grown from small beginnings to a large organization and a vast amount of good has been the result of our gatherings. Thanks to many railways in your country, we have had some splendid opportunities of visiting a great many points of interest, and the result has been most beneficial to our members. The stock in trade of a ticket agent's business is his knowledge of the geography of the railway world, a knowledge which is of vast importance to himself and the company he represents. How is he to gain this knowledge? Not by sitting in his office year after year trusting to time-tables and advertising matter for his information, but by getting out on the road as often as possible; keeping in touch with all the changes you are continually making in your terminals, in your train service; and a hundred and one items in connection with the handling of traffic. Knowledge is power, and the ticket agent who is able to talk from the book usually gets the business. Unfortunately there have been passed by your Government some laws which prohibit many members of our association from taking advantage of transportation, which we feel quite sure you would like to extend to us. From our side of the house we think this is a great mistake. There are a great many ticket agents in our country who are not wholly engaged in transportation, but who make the very best kind of agents. They are men of influence and power and are just the class of agents who are in a position to promote and encourage travel. We feel quite sure that you want our tourist travel, which is getting bigger every year, and we want to give it to you, but we want to do so in an intelligent and satisfactory manner. There is a vast difference to-day in the handling of passengers compared to 20 years ago, and an agent must be thoroughly posted when it comes to the question of giving information. If he gets no opportunity of educating himself by travel, he loses interest in his work, and very often will send a passenger to the first junction point and then let him shift for himself. We feel that the railway companies of your country should have sufficient influence with the Government to amend the law so that any Canadian ticket agent holding a license to sell tickets, should be allowed the privileges that they have always enjoyed. We all hope that you can see your way clear to take up this matter and that in a very short time we will be able to accept courtesies which we know you would like to extend to us.

I will detain you no longer, but will close by saying that, living as we do under the flags of the two greatest nations in the world, living as cousins and neighbors, and associated in a social and commercial way, I think that gatherings of this kind do not come often enough, and I hope the time is not far distant when we will again have the pleasure of welcoming you to our country, to extend to you our hospitality, and to renew friendships which will be made upon this occasion.

The election of officers for the current year resulted as follows: President, G. T. Bell, General Passenger and Ticket Agent, G.T.R.; Vice-President, S. G. Hatch, General Passenger Agent, Illinois Central Rd.; Secretary, C. M. Burt, General Passenger Agent, Boston and Maine Rd. Toledo, Ohio, was selected as the place of meeting in 1909.

The social features of the meeting, which were in charge of a committee of which B. W. Folger, Manager of the Niagara Navigation Co. was chairman, included automobile and street car rides around the city, two theatre parties, a sail around the harbor, and tea at the Royal Canadian Yacht Club. The members of the Association and a number of other guests were entertained at a magnificent dinner by the Canadian National Exhibition Association.

The G.T.R. Co. ran two special trains to carry members to Toronto for the meeting, one from New York coming over the G.T.R. from Suspension Bridge, N.Y.; the other from Chicago. On the night of Sept. 23, two special G.T.R. trains conveyed the members, their ladies and several guests, to the Lake of Bays and Temagami districts, where a couple of days were spent most enjoyably.



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Third Quarter Just Out

THE Quarterly Publication "REACTIONS" will be mailed free of charge to anybody in the United States, Canada or Mexico. The Third Quarter of this paper contains a number of very interesting articles and is profusely illustrated. Subjects treated of are the following: Welding Locomotive Frames and Driving Wheel Spokes, A New Development in Rail Welding, New Thermit Reactions, Welding Two Large Anchors, Quick Repair to a Rudder Frame, Welding Propeller Strut of German Warship, Hard Spots in Steel Castings and Improving Cast Iron.

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Board of Railway Commissioners.

The Canada Gazette contains the following official announcement of the appointment of the Board of Railway Commissioners, dated Sept. 17: "James Pitt Mabee, of the City of Toronto, in the Province of Ontario, Esquire; The Honourable Michel Esdras Bernier, a Member of the King's Privy Council for Canada; James Mills, of the City of Guelph, in the Province of Ontario, Esquire; D'Arcy Scott, of the City of Ottawa, in the Province of Ontario, Esquire, Barrister-at-law; Thomas Greenway, of the City of Winnipeg, in the Province of Manitoba, Esquire; and Professor S. J. McLean, of the City of Toronto, in the Province of Ontario; to be Members of the Board of Railway Commissioners for Canada, under the provisions of chapter 62, 7-8 Edward VII, intituled An Act to amend the Railway Act. The said James Pitt Mabee to be Chief Commissioner on the Board, and the said D'Arcy Scott to be Assistant Chief Commissioner thereof."

Messrs. Mabee, Bernier and Mills were members of the old Board of three; Messrs Scott, Greenway and McLean are new appointees, increasing the membership of the Board from three to six. Under the Act of last session, authorizing the increasing of the number of commissioners, it is provided that the Assistant Chief Commissioner shall have all the powers of the Chief Commissioner, but such powers shall not be exercised by him except in the absence of the Chief Commissioner. The salary of the Chief Commissioner is $10,000 a year, of the Assistant Chief Commissioner $9,000, and of the other Commissioners $8,000. Biographical information respecting the new appointees will be found under Mainly About People on another page.

Although not so stated in the Gazette notice reproduced above, it is understood that Hon. Mr. Bernier retains the title of Deputy Chief Commissioner, which he has had since the formation of the first Board, and that he has power to discharge their duties in the absence of both of them, or in consequence of their inability to act.

The work of the Board, an Ottawa dispatch states, is increasing in volume year by year. For the year ended June 30, the number of applications and its general business increased by 35% in comparison with the preceding twelve months.

The Commission sat at Ottawa Sept. 1 and following days, and took up the consideration of a number of cases, the most important being the application of the G.T.R. for a definition of necessary work as applied to railways under the Lord's Day Act. After hearing lengthy arguments the Commissioners reserved judgment, but it is understood that an order will be made modifying to some extent the regulation that no trains can be broken up, and no cars of perishable freight forwarded to their destinations on Sundays. In the same connection the Pere Marquette Rd. asked for permission to operate a car ferry across Lake Erie, in connection with the operation of through trains.

Chief Commissioner Mabee and Commissioner Mills opened sittings in Winnipeg Sept. 13, for the purpose of hearing a number of western cases. The principal case is that of freight rates, which was brought forward at the request of the Winnipeg Board of Trade, which alleged that the rates were framed in the interests of the shippers in the eastern cities.

The October sittings of the Board will open at Ottawa Oct. 6.

THE CHIEF COMMISSIONER'S DESIGNATION.

One of our subscribers has written us asking how the Chief Commissioner should be addressed, whether with the prefix "The Hon." or with the affix "Esq." The proper address is undoubtedly "J. P. Mabee, Esq." When Mr. Mabee was on the Ontario bench he had the courtesy title of "the Hon. Mr. Justice." On his resignation from the bench he ceased to be entitled to the prefix of "Hon." and it is incorrect and in bad form to so address him now. We have noticed recently that in the copies of the Board's orders issued by the Secretary, Mr. Mabee is spoken of as "The Hon. J. P. Mabee," and in a report of a hearing before the Board recently, the official reporter designated him as "The Hon. Mr. Justice Mabee." Both forms are wrong. When Mr. Killam, who had prior to his appointment to the Board been one of the judges of the Dominion Supreme Court, was Chief Commissioner, he was never spoken of as "Hon." in the official records. It will be noted that in the Canada Gazette's official announcement of the appointment of the Board, which is reproduced above, the Chief Commissioner is spoken of as "J. P. Mabee, Esq." This announcement was prepared in the Secretary of State's office, and may therefore be considered as authoritative and conclusive. Mr. Mabee is, we feel sure, too broad-minded a man to desire to be addressed by any fictitious title, and he would, we think, rather resent the use of it. In the United States, with all its boasted democracy, the tendency is to give everyone titles, even the mayor of a town being styled "Hon." In Canada we should steer clear of such snobbery. In connection with the foregoing it may be mentioned that another member of the Board, Mr. Bernier, is entitled to be addressed as "The Hon." as it is laid down in the well-known dispatch of the Duke of Buckingham and Chandos, then Secretary of State for the Colonies, to the Governor-General of Canada, dated July 24, 1868, that Privy Councillors of Canada shall be styled "Honourable," and for life. Mr. Bernier is the only member of the Board entitled to the prefix "Hon." Mr. Greenway is an ex-member of the Manitoba Government, but the dispatch already quoted says that executive councillors of the Provinces shall be styled "Honourable," but only during office, and the title not to be continued afterwards. In the official Canada Gazette Mr. Greenway is designated as "T. Greenway, Esq."

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Railways Outside Dominion Jurisdiction.

The Senate passed a resolution at last session asking for a statement giving a list of all railways in Canada which are not under the control or jurisdiction of the Board of Railway Commissioners, and stating in each case the reason why the railway is not controlled by the Commission. In response the Secretary of the Board has furnished the following list, stating that the railways mentioned have not been declared to be works for the general benefit of the Dominion, and are not therefore subject to the Board's jurisdiction:

Beersville Coal and Ry. Co.
Bracebridge and Trading Lake Ry.
Brandon Transfer Ry.
Brantford and Erie Ry.
Buctouche and Moncton Ry.
Burk's Falls and French River Ry.
Campbellford, Lake Ontario and Western Ry.
Cape Breton Ry.
Caraquet Ry.
Carillon and Grenville Ry.
Central Ry. of Canada.
Central Marmora Ry. and Mining Co.
Crow's Nest Southern Ry.
Edmonton, Yukon and Pacific Ry.
Halifax and South-Western Ry.
Hereford Ry.
Hillcrest Ry. and Coal Co.
Huron and Ontario Ry.
Inverness Ry. and Coal Co.
Irondale, Bancroft and Ottawa Ry.
International Ry. of New Brunswick.
Indian River Ry.
International Coal and Mining Co.
Kaslo and Slocan Ry.
Kent Northern Ry.
Liverpool and Milton Ry.
Lotbiniere and Megantic Ry.
Magnetawan Ry.
Massawippi Valley Ry.
Midland Ry. of Manitoba.
Montreal and Atlantic Ry.
Montreal and Province Line.
Montreal and Vermont Jct. Ry.
Morrissey, Fernie and Michel Ry.
New Westminster Southern Ry.
Nosbonsing and Nipissing Ry.
Nova Scotia Steel and Coal Co.'s Ry.
Pacific Northern America Ry.
Phillipsburg Ry. and Quarry Co.
Princeton Branch Washington Co. Ry.
Quebec Central Ry.
Quebec and Lake St. John Ry.
Stanstead, Shefford and Chambly Ry.
St. Clair Tunnel.
Sydney and Louisburg Ry.
Temiskaming and Northern Ontario Ry.
Vancouver Copper Co.'s Ry.
Victoria and Sidney Ry.
Victoria Terminal Ry. and Ferry Co.
Wellington Colliery Co.'s Ry.
York and Carleton Ry.

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The Superior Court, on the application of the liquidators of McRae, Chandler and McNeill, Ltd., made an order Sept. 24, calling on J. L. Englehart chairman; F. Dane, D. Murphy, Commissioners; A. J. M'Gee, Secretary; G. A. McCarthy, C. B. Smith, J. M. Bourk, Engineers; and T. S. Scott, Superintendent, all of the Temiskaming and Northern Ontario Ry., to appear before the court for the purpose of being examined in connection with the construction of the railway and to produce all books, papers and records in connection therewith.

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ELECTRIC RAILWAYS.

Height of Street Car Steps.

On Sept. 9, Helen MacMurchy, a Toronto physician, filed with the Ontario Railway and Municipal Board a complaint against the Toronto Ry. Co. and all other street and electric railways under the Board's jurisdiction, setting forth that the Board has power under the act respecting the Board passed in 1906, as amended in 1908, to make regulations with respect to car steps, so as to provide for the public's due protection, comfort and convenience, and that the Toronto Ry. and other railways in other Ontario cities and towns "are operating cars the steps of which are so high from the ground that the same are not only a menace to the safety of, but are exceedingly uncomfortable and inconvenient for the public." The complainant asked that the Board order that the first step of street and electric cars be from 9 to 12 ins. from the ground, and that the other steps have a rise of from 7 to 9 ins. The Board fixed a hearing of the application for Sept. 24, at 2.30 p.m., and notified the electric railways and municipalities interested.

At the hearing a number of witnesses were examined on Miss MacMurchy's behalf, for the purpose of showing that some of the steps on the Toronto Ry. Co.'s cars are too high for convenience and safety. Evidence was given by Doctors McPhedran, Reeve, Burnham, C. L. Starr, F. N. G. Starr, MacMurchy and Marlow. In their examination they all said that the single track car steps were satisfactory, but that they considered the steps on the double-truck cars too high for comfort, and difficult for old and infirm people. In cross-examination it was shown that several of the doctors examined were not general practitioners, but eye and ear specialists, etc. Only one of them could remember any specific case in his practice where any injury had resulted from the height of the steps, and in that instance a man who had had his back injured previously by some other cause, had had it strained, and stated that the strain was caused by getting off a car. Some of the medical men said the height of some of the

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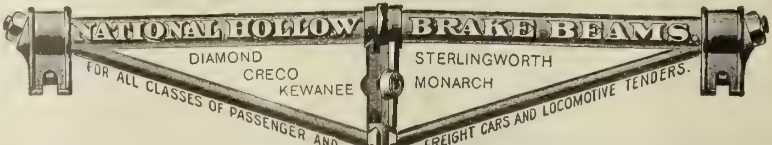

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steps might be injurious to women in certain conditions of health, especially if they got off backwards, which Dr. F. N. G. Starr remarked most of them did. All of the medical witnesses expressed the opinion that 12 inches should be the maximum height of the first step from the ground. Three ladies, a school master and a merchant were examined on behalf of the applicant, all of them expressing the opinion that many of the Toronto car steps were too high. Another witness who had measured the steps of a number of cars produced a list of measurements showing heights of from 10½ to 17 inches.

The City Solicitor of St. Thomas, Ont., where a municipally-owned line is run, said there were no complaints against the height of the steps there, and contended that the case should be dismissed as against that road. Counsel for the Niagara Falls Park and River Ry., the International Transit Co., and the Kingston, Portsmouth and Cataraqui Electric Ry., took similar ground and showed that it would be practically impossible to lower the steps on their lines. The Board was also addressed by J. E. Hutcheson, Superintendent Ottawa Electric Ry., and President Canadian Street Ry. Association; Acton Burrows, Secretary Canadian Street Ry. Association; N. P. Baker, Assistant to the General Manager, International Ry. Co., and C. B. King, Manager London St. Ry. The Solicitor for West Toronto said the Council had instructed him to support Dr. MacMurchy's application, and a letter was read from the City Engineer of London, Ont., giving his opinion that 12 inches should be the maximum height.

After conferring with the other members of the Board, Chairman Leitch said that every municipality interested had been notified of the hearing, but that no municipality had sent in any complaint. Evidence had been submitted against the Toronto Ry., the City Solicitor of West Toronto appeared to support the application and a letter had been received from the City Engineer of London, stating that, in his opinion, the maximum height should be 12 inches. As far as the companies operating in Toronto, West Toronto and London were concerned, it was only fair that they should have ample time to produce evidence and the further hearing as against them would therefore be adjourned until Oct. 28, at 2.30 p.m. It might then be found necessary by the Board to have an investigation made by its engineer or some expert. As far as the other companies operating in the Province were concerned, no evidence had been adduced against them, there were no complaints from the municipalities, and the application would therefore be dismissed as far as they were concerned.

A considerable number of women were present at the hearing as spectators, and commenced applauding one of the first witnesses. The chairman firmly stated that there must be no applause, and that they must remember they were before a court of justice and not attending a town meeting.

Projects, Construction and Betterments.

Belleville Radial Ry.—Application will be made next session of the Ontario Legislature for an act incorporating a company with this title, for the purpose of constructing a railway to be operated by electricity or other motive power in Belleville, and from the city easterly through Thurlow tp., and through the southerly part of Thurlow tp., known as Point Anne, also through Tyendinega tp. to Shannonville. It is proposed to ask for authority to use steam as a motive power during the period of construction. W. S. Morden, Belleville, is solicitor for applicants.

British Columbia Electric Ry.—The contract for the grading of the second section of the line under construction from New Westminster to Chilliwack has been awarded to Ironsides, Rannie and Campbell. The section includes the 26-mile stretch between Cloverdale and Abbottsford. The line will pass through the towns of Surrey, Delta, Langley and Matsqui, and is to be completed by June 1, 1909. At Vancouver a freight shed is to be constructed for handling the freight on the company's New Westminster interurban line and the Vancouver and Lulu Island Ry. A central passenger station and office building is also to be built at Carroll and Hastings Streets.

In connection with the undertaking of the Vancouver Power Co., which is owned by the B.C.E.R. Co., a contract has been let to John McDougall, Caledonian Iron Works Co., Montreal, for the installation of an 11,000 h.p. turbine at Lake Buntzen, which, with other improvements there, is estimated to cost $300,000.

The appropriations for the current year's work at Victoria include, in addition to amounts for rolling stock, $35,000 for an extension of the line to the cemetery; $15,000 for feeders to existing lines; $12,000 for new buildings; $10,000 for relaying tracks; $10,000 for improvements at Gorge Park, and $30,000 for extensions to the company's lighting system. (Sept., pg. 665.)

Calgary, Alta.—After several meetings, at which the offer of the Montreal Engineering Co. to construct an electric railway system in the city was discussed, the special committee appointed by the Calgary City Council Sept. 10, appointed a sub-committee to draft an agreement for submission to the company. The sub-committee suggest, as a basis of the agreement, a franchise for 20 years; the control by the city of extensions, and time-tables; the fixing of the fares at the same rates as in Toronto, and the division of receipts as follows: First five years, all to the company; sixth year, 5% of the receipts to be paid to the city, the percentage increasing annually until the 15th year, when 15% is to be paid, the percentage to remain at that amount until the termination of the franchise. (Aug., pg. 583.)

Chatham, Wallaceburg and Lake Erie Electric Ry.—The through service on this line between Wallaceburg and Lake Erie points was inaugurated Aug. 26, the subway under the Michigan Central Rd. tracks at Charing Cross, Chatham, Ont., having been completed. (Dec., 1907, pg. 927.)

Edmonton, Alta.—It is expected that the formal opening of the electric car lines in Edmonton will take place early in Nov. The grading has been completed on Ninth St. from Jasper Ave. to Saskatchewan Ave., and the tracks are being laid. Practically all the poles for the overhead work on the entire route have been placed in position, including the extension into Strathcona, and north through Norwood. Grading operations are in progress on Namayo St., and when this is finished all the roadbed on the Edmonton side of the river will have been prepared for track-laying. Car barns are to be erected in the north end of the city. (Sept., pg. 665.)

Hull Electric Co.—At a meeting of the Hull, Que., City Council, Sept. 9, the C.P.R., owning the H.E. Co., was granted leave to run a double track from the Interprovincial bridge via Youville St. This matter has been a point of considerable negotiation between the company and the council. (Aug., pg 583.)

Hamilton, Waterloo and Guelph Ry.—The principal promoter of this railway, Jno. Patterson, of Hamilton, Ont., reached London, Eng., Sept. 9, for the purpose of making financial arrangements with a view to the early construction of the line. (July, pg. 509.)

Montreal and Southern Counties Ry.—It is reported that construction will shortly be started on the first section of this line, which will extend from Grey Nun St., Montreal, along Common St., Black's Bridge and the Victoria Bridge to St. Lambert. However, there is no definite information on the subject. (Sept., pg. 665.)

Montreal Street Ry.—At a meeting of the ratepayers of Montreal West, held Sept. 10, the company's proposals for the construction of a new line of about a mile through that town were rejected. A counter proposal for a 25-year franchise, the cost of the removal of the snow to be borne equally by the town and the company, was made. (Aug., pg. 583.)

Niagara, St. Catharines and Toronto Ry.—Construction of the wooden trestle bridge, 260 ft. in length, across the Welland River, is being proceeded with, and W. R. Robertson, Superintendent of the line, is quoted as saying that it would be completed by the end of Oct. The completion of this bridge will give the company an entrance right into the town of Welland, Ont. (Aug., pg. 583.)

North Midland Ry.—A. E. Welch, on the occasion of his recent return to London, Ont., from London, Eng., said he had been successful in his mission of securing the necessary financial backing for the carrying out of the company's undertaking. Nothing, however, has been decided with regard to the commencement of construction. (Aug., pg. 583.)

Ontario West Shore Electric Ry.—J. W. Moyes, President, visited Owen Sound, Ont., recently, with a view of looking over the ground for an extension of this projected line. He said he expected to be in a position to lay a proposal before the town council at an early date. The company has under construction at present the section of the line between Goderich and Kincardine. It is reported that construction will be proceeded with throughout the winter, and Mr. Moyes says that, as far as possible, local men will be employed on the work. The number of men and teams available for the work had not, to Sept. 15, been what was desired, but it was hoped that when the harvest work was done a larger number would be available. The Maitland River power development, Mr. Moyes said, was a necessary feature in the success of the railway, and he hoped shortly to be able to announce definitely the commencement of operations on that. (Sept., pg. 665.)

The Ottawa Electric Ry. has put in new cedar ties, 24 in. centres, on the whole 5 miles of its Britannia branch.

The company is building an extension to the Dominion Government Experimental Farm. Starting from the existing line at Victoria Park, Holland Avenue, the new line, which is double-track, crosses a road and enters the farm grounds, through which it runs for about 1¼ miles to the offices and buildings, where a loop is being built. Centre iron pole tracked construction is being used, cedar ties, 28 in. centres, steel rails 80 lbs., A.S.C.E. section, with continuous rail joints. The distance between tracks is 9 ft.

Good progress is being made with the construction of the extension from Holland Ave. to the Experimental Farm, and it is expected that the branch will be ready for opening early in Nov. The company is negotiating with the city council for permission to construct a loop at the south end of Elgin St., for convenience of operating the Experimental Farm extension. (Sept., pg. 665.)

South-Western Traction Co.—As a result of the investigations of the Ontario Railway and Municipal Board into construction matters in dispute between the company and the authorities of the village of Port Stanley, Ont., J. A. Bell, C.E., has been appointed to supervise the construction, both parties offering to accept his decisions on the disputed points. (Aug., pg. 585.)

Stratford and St. Joseph Radial Ry.—J. L. Thomas, C.E., London, Ont., stated, Sept. 6, that a section of the projected electric railway from Stratford to St. Joseph, Ont., had

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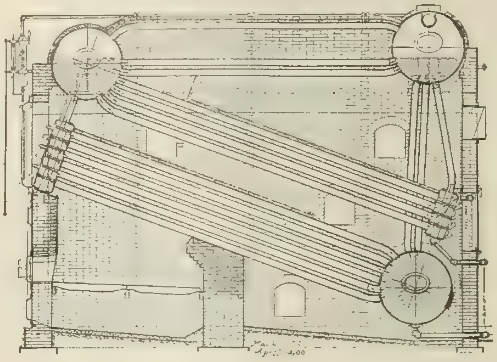

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been pegged out ready for the contractors to start work. The line as surveyed will run from Stratford to Exeter, Hensall and St. Joseph.

N. M. Cantin, of St Joseph, Ont., and M. Vosburg, of Boston, Mass., were in Stratford recently, and went over the route of the proposed line. Mr. Cantin said, "When Mr. Vosburg has inspected the route, and consulted his friends, there will be more to say in connection with the project. (July, pg. 509.)

Toronto and York Radial Ry.—A proposition is said to be ready for laying before the municipalities involved for the construction of a branch line from near Langstaffe, on the Metropolitan Division, to Markham Village, thence to Locust Hill, and on to Port Perry, Ont. An alternative plan is for a route diverging from the Scarboro Division, near the Markham Road, to Markham Village, and then on to Port Perry. (June, pg. 431.)

Toronto Suburban Ry.—The West Toronto City Council informed G. E. Royce, Manager T.S.R., Sept. 8, that the council was utterly opposed to the laying of tracks on Annette St., for the projected line to Swansea, and suggested a route via Humberside Ave. Mr. Royce said, if the company could not get the Annette St. route it would not construct the line at all. An appeal will probably be made to the Ontario Railway and Municipal Board to approve of the Annette St. route. (Sept., pg. 665.)

Winnipeg Street Ry.—Application has been made to the Board of Works for permission to double-track the line from McPhillips St. to the C.P.R. crossing, and to lay some additional lines. The locations were approved, subject to certain conditions as to the operation of cars. The company has a large force of men employed enlarging the channel at Lac du Bonnet, with a view of increasing the water power at its electrical development plant.

At the meeting of the Winnipeg City Council, Sept. 14, the company's Secretary wrote, offering to supply the council with 10,000 h.p. of electrical energy, at $18.40 per h.p. per year for ten years. The council ordered the letter to be filed. (April, pg. 283.)

Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Gross earnings for July, $174,410; operating expenses, $92,172; net earnings, $82,238; other income, $13,550; less renewal funds, $13,816; net income, $81,972; against $151,340 gross earnings; $77,878 operating expenses; $73,462 net earnings; $11,036 other income; less $11,030 renewal funds; $73,468 net income, for July, 1907.

Edmonton-Strathcona.—By a practically unanimous vote, Aug. 28, the taxpayers authorized the Edmonton City Council to raise $125,000 by means of debentures to put the entire street railway system in operation, and to purchase the charter of the Strathcona Radial Ry. The vote was 710 for the by-law and seven against.

Galt, Preston and Hespeler Street Ry.—The conveyances of this line and of its connection, the Preston and Berlin Street Ry., to the Berlin, Waterloo, Wellesley and Lake Huron Ry., have been deposited with the Dominion Secretary of State, as also has the lease of the B., W., W. and L.H. Ry. to the C.P.R.

Halifax Electric Tramway Co.—The usual quarterly dividend of 1½% has been declared payable Oct. 1.

Receipts for Aug., $20,052.81, against $19,611.41 for Aug., 1907. Receipts for 3 weeks ended Sept. 21, $16,144.77, against $11,391.06 for same period 1907. Total receipts for 8 months ended Aug. 31, $119,818.26, against $115,262.51 for same period 1907.

Hamilton Street Ry.—By a majority of 20 votes the taxpayers of Hamilton, Ont., decided Sept. 16 to sanction the making of a new bargain with the Street Ry. Co. It provides that the company instal a new system with a number of extensions in return for a reduction in the percentage payable to the city from 8% to 6% on all earnings over $316,000. It is said the company will not accept the proposed arrangement.

London St. Ry.—Gross earnings for July, $22,062.63; operating expenses, $14,556.24; net earnings, $7,506.39; fixed charges, $2,350.77; surplus, $5,155.62, against $23,272.07 gross earnings; $15,436.91 operating expenses; $7,835.16 net earnings; $2,291.94 fixed charges; $5,543.22 surplus for July, 1907. Gross earnings for 7 months ended July 31, $129,054.05; operating expenses, $95,616.26; net earnings, $33,437.79; fixed charges, $16,224.59; surplus, $17,213.20; against $130,704.43 gross earnings; $96,685.62 operating expenses; $34,018.81 net earnings; $15,676.98 fixed charges; $18,341.83 surplus for same period, 1907.

Montreal Street Ry.—Two actions have been entered against the company by the city council, one of them being directly against the company, and the other against it as owner of the Montreal Terminal Ry., to recover the balance of accounts for now clearing during the winter of 1907-08. The amounts in dispute are $20,598.21 and $1,091.73 respectively, and the company refuses to pay, alleging fraud and extravagance.

Gross earnings for Aug., $329,772.05; operating expenses, $164,261.92; net earnings, $165,510.13; city percentage on earnings, $36,137.89; interest on bonds and loans, $17,530.22; contingent for renewals, $15,965.00; rent leased lines, $444.43; surplus, $95,432.59; against $329,755.11 gross earnings; $184,844.15 operating expenses; $144,910.96 net earnings; $32,906.56 city percentage on earnings; $17,851.27 interest on bonds and loans; $16,110.23 contingent for renewals; $339.96 rent leased lines; and $77,702.94 surplus for Aug., 1907. Total earnings for 11 months ended Aug. 31, $3,329,059.97; operating expenses, $1,978,659.18; fixed charges, $585,966.29; surplus, $764,434.50; against $3,164,399.46 total earnings; $1,946,389.33 operating expenses; $524,555.10 fixed charges; and $693,455.03 surplus for same period 1907.

Quebec Ry., Light and Power Co.—The annual general meeting of shareholders was held at Quebec Sept. 8. Following are the officers and directors for the current year: President, G. H. Thomson; Vice-President, F. Ross; other directors: Hon. J. Sharples, F. W. Ross, W. Price, L. C. Marcoux, W. Shaw, R. Forget, W. Hanson.

Toronto Ry.—A quarterly dividend at the regular rate of 1½% has been declared payable to shareholders of record Sept. 15, on Oct. 1.

Car earnings for Aug., $299,532.97, against $319,797.64 for Aug., 1907. Total earnings for 8 months ended Aug. 31, $2,271,926.58, against $2,196,668.54 for same period 1907.

Electric Railway Notes.

The Hamilton, Ont., Street Ry. Co. started operating its cars at eight instead of ten o'clock on Sundays, on Sunday, Sept. 13.

As the result of a petition from the residents of the district the Niagara, St. Catharines and Toronto Ry. resumed the Sunday operation of cars over its Welland division, Sunday, Sept. 13.

A petition signed by 80 merchants and manufacturers of Montreal was presented to the city council Sept. 14, asking that permission be given the Montreal Street Ry. to haul freight along its lines during certain hours. The question has been under discussion for over a year.

An explosion of natural gas, which is used for generating electricity at the Chatham, Ont., power house of the Chatham, Wallaceburg and Lake Erie Electric Ry., occurred Aug. 31, causing considerable damage. The engineer, who was at the furnace door at the time of the explosion, escaped without injury.

A Board of Conciliation has been appointed to adjust certain matters in dispute between the employes of the Quebec Ry., Light and Power Co., and the company. W. H. Moore, General Manager Toronto and York Radial Ry., has been appointed to represent the company, and Alderman Brunet of Quebec will represent the men.

Jas. Milne, General Superintendent of the British Columbia Electric Ry., and formerly of Toronto, was arrested in Vancouver Sept. 23 charged with falsifying the company's pay rolls. Two of the company's minor officials were arrested on similar charges recently. One was sent to jail for three months, the other fled to the United States while on bail.

Col. J. M. Gibson, Hamilton, who has been appointed Lieut.-Governor of Ontario, has resigned his position as President of the Dominion Power and Transmission Co., owning or controlling the Hamilton St. Ry., the Hamilton and Dundas Ry., the Hamilton Radial Ry., the Hamilton, Grimsby and Beamsville Electric Ry., and the Hamilton and Brantford Ry.

N. P. Baker, heretofore Superintendent, Niagara Falls Division, International Ry., with office at Niagara Falls, N.Y., has been appointed Assistant to the General Manager, with office at Buffalo, N.Y. M. Sheehan, heretofore Superintendent Buffalo, Lockeport and Olcott Division, has had his jurisdiction extended over the Niagara Falls Division. Office, Niagara Falls, N.Y.

W. C. Franz, who has been appointed General Manager of the Lake Superior Corporation, thereby became also General Manager of its subsidiary, the International Transit Co., which operates the electric railways at Sault Ste, Marie, Ont., and Mich. The position of acting Manager has been abolished, and J. S. Wynn, who filled it, has resumed his duties as General Auditor of the Lake Superior Corporation.

The Interurban Electric Co. has been incorporated under the Ontario Companies Act, with a capital of $400,000, to take over the assets and franchises of the Stark Telephone, Light and Power Co., and to operate steam and electric railways, telephone systems, and to generate electricity for light, heat and motor purposes, in the cities of Toronto and West Toronto, and the townships of York, Toronto and Etobicoke. The provisional directors are: E. S. Adamson, F. Grundy, A. N. Morine, M. McDonald, C. H. Porter, G. D. Lewis and G. T. Turnbull.

Judge H. O'Leary was, Sept. 17, appointed the fifth Commissioner for the Port Arthur and Fort William Railway Commission. The four Commissioners appointed could not agree upon a fifth, and an application was made to the Ontario Railway and Municipal Board to name a man. On Sept. 14 Judge O'Leary granted an application for an injunction to restrain the Board from making such an appointment. Subsequently the mayors of the two cities telegraphed their agreement to the appointment of Judge O'Leary. The matter, however, is likely to come before the courts in another way, as certain ratepayers object to the appointment of a commission until a by-law has been submitted respecting the same. This matter is set down for hearing before Chancellor Boyd at the November sittings in Toronto.

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Manufacturers of

BROAD AND NARROW GAUGE
SINGLE EXPANSION AND COMPOUND

LOCOMOTIVES

Mine, Furnace and Industrial Locomotives
Electric Locomotives with
Westinghouse Motors and Electric Trucks

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THE BRYDGES ENGINEERING & SUPPLY CO.
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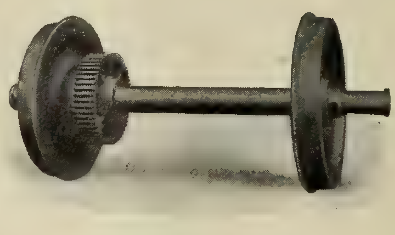

Wheels mounted on axles fitted with motor gear
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SOLID FORGED AND ROLLED STEEL WHEELS
STEEL TIRED WHEELS STEEL AND IRON AXLES
ELLIPTIC AND HELICAL SPRINGS

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MACHINERY
Complete Power Plants designed and installed.

Sole Manufacturers in Canada for Worthington Turbine Pumps and Doble Impulse Water Wheels.

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WINNIPEG—251 Notre Dame Avenue.
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TORONTO—810 Traders Bank Building.
VANCOUVER—416 Seymour Street.
NEW GLASGOW, N.S.—Telephone Bldg.

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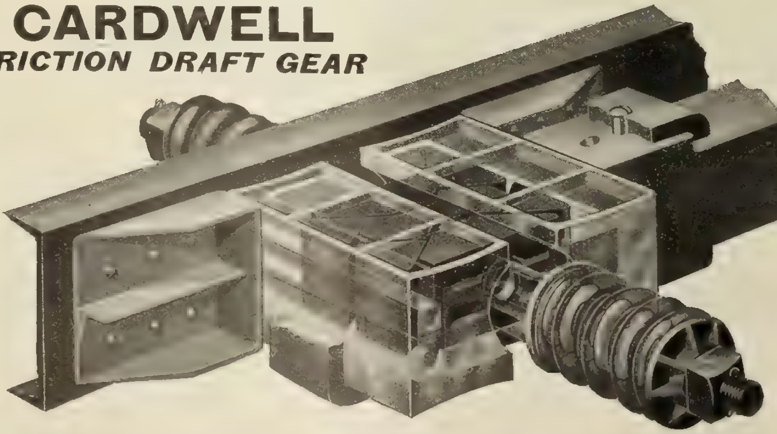
FRICTION DRAFT GEAR



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Manufacturers of CARDWELL ROCKER SIDE BEARINGS.

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AMERICAN LINE
Plymouth—Cherbourg—Southampton
Sailing from New York Saturdays.
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ATLANTIC TRANSPORT LINE
New York—London
Sailing from New York Saturdays.

DOMINION LINE
Portland to Liverpool—Winter
Montreal—Quebec—Liverpool
Montreal to Avonmouth Docks
(Bristol and Antwerp)

LEYLAND LINE
Boston—Liverpool
Sailing from Boston Wednesdays.

RED STAR LINE
New York—London-via-Dover—Antwerp
Sailing from New York Saturdays.

WHITE STAR LINE
New York—Liverpool—Queenstown—
Sailing from New York Thursdays.
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41 KING ST. EAST, TORONTO.

W. E. & L. S. R. Railway Locomotive.

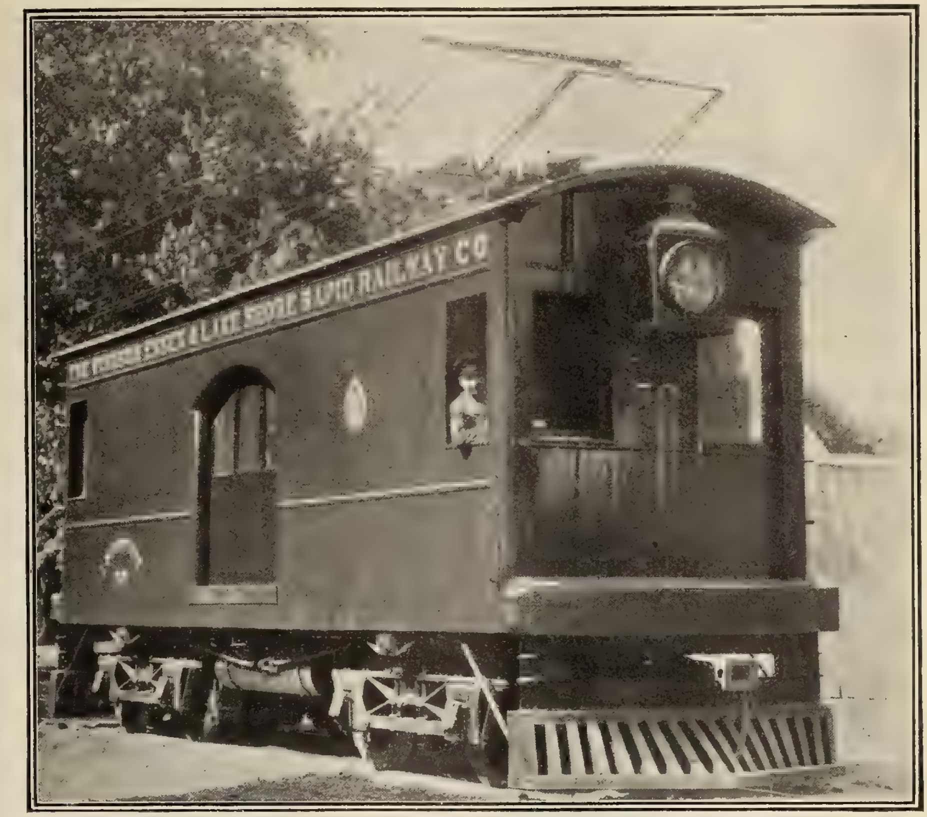
The Windsor, Essex and Lake Shore Rapid Ry., with headquarters at Kingsville, Ont., has completed recently an interesting locomotive which is illustrated on this page. In designing this locomotive special attention was paid to having motors, wheels, gears and axles interchangeable with those on the motor cars. The latter are equipped with two Westinghouse no. 132 100-h.p. motors in parallel, while in the locomotive there are four motors of the same type, the two motors on each truck being in series and the two sets in parallel.

The locomotive was built for pulling gravel cars for ballasting, hauling general freight and for handling trains on excursion days. The general data of the locomotive are as follows: Approximate weight, 35 tons; length, 37 ft.; width, 8 ft.; distance between centres of trucks, 20 ft. 3 in., and weight of each motor, 4,900 lbs. The main part of the frame consists of two longitudinal sills of 12-in. I-beams placed 13 in. apart, with white oak fillers and bolted together. The outside sills are 8 x 12 in. oak, and the end sills 12 x 12 in. oak. The car bolsters are 12 x 12 in., the centre cross sill 8 x 12 in., with an intermediate sill of 6 x 12 in., all of oak. At every cross piece, including the bolsters, the two outside longitudinal sills are held together by two 1-in. bolts, one placed on each side of the cross timber. The washers and nuts are recessed in the side of the sills and covered by the V-matched siding, which forms the outside finish of the car. Additional strength was given by putting in 6 x 12 in. oak diagonal braces, as shown in the plan. The end sills are held in place by the two 1¼-in. truss rods, each of which is just inside the outside sills, and two straight 1¼-in. bolts which run the whole length of the car, one on each side of each of the 12-in. I-beams. The bumpers were constructed of 12 x 12 in. oak rounded on the outside and bolted to the end sills. These were faced with 12 x ¼ in. steel.

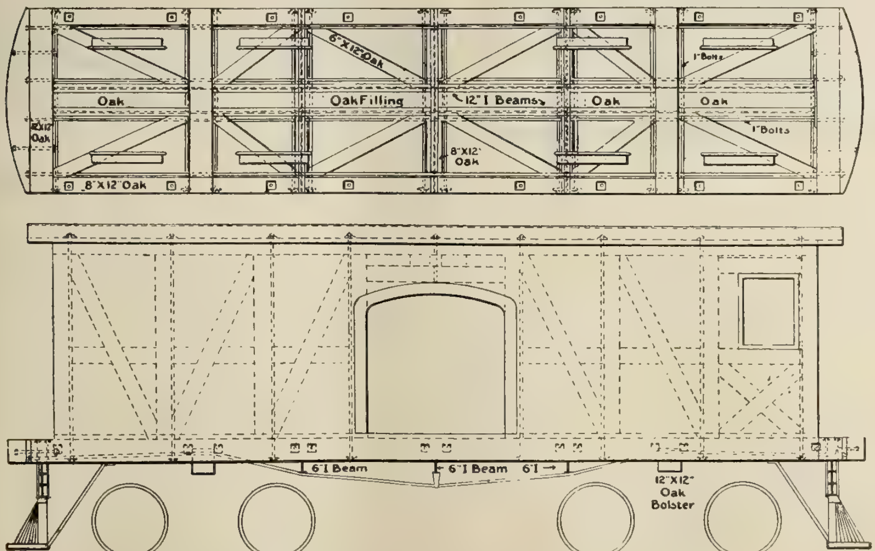
On the elevation it will be seen that the vertical supports forming the truss structure of the locomotive do not come immediately over the bolsters and needle beams. Owing to the length of the locomotive it was difficult to place the vertical supports in exactly these positions, and the floor frame was considered strong enough to afford rigidity under any conditions to which the locomotive is likely to be subjected. There are three 6-in. needle beams, as shown on the elevation, the truss rods passing immediately beneath two of them, while the centre needle beam has a strut through which the rod passes.

Sliding doors are placed on the sides of the car so that it can carry a certain amount of freight. As the locomotive is to be run in both directions, a motorman's cab is built at each end. The flooring is of 2-in. pine, and space has been left under the apparatus in the car to lay a floor of steel rails if it is found that the weight of the locomotive has to be increased. The roof is of 1-in. pine boards, covered with painted canvas of good quality. Swinging draw heads are used.

The framing of the car and the general layout of the apparatus were designed by H. T. Gibbs, who represented the Canadian Westinghouse Co. in the installation of the electrical machinery at the plant.



WINDSOR, ESSEX AND LAKE SHORE RAPID RAILWAY ELECTRIC LOCOMOTIVE



W. E. AND L. S. R. R.—PLAN AND ELEVATION OF LOCOMOTIVE FRAMING.

The locomotive is equipped with two trucks. The wheels are 36 in. in diameter. The distance between centres of wheels is 6½ ft. The axles are 6 in. in diameter, and are the same as used on the company's interurban cars. The motors and all other electric as well as air apparatus is of Westinghouse manufacture. There is one 100-h.p. motor on each axle, making a total of 400 h.p. The weight of the truck with wheels and without motors is 9,750 lbs.

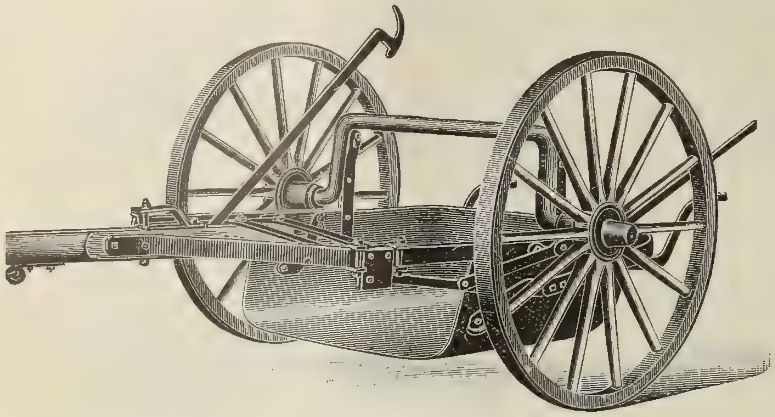
The locomotive is provided with the unit switch system of control, shown in the accompanying schematic diagram. The 104-volt lead shown on this sketch is used for the lights, the compressor motor and the motor-generator set for charging the storage batteries. From the table giving the sequence of switches, it will be seen that the first position of the master controller closes the four motor switches and nos. 1, 2, 3 and 4 of the switch group. On a trial of the locomotive it was found that it started up too rapidly, which made coupling dangerous, besides starting the train with a jerk. To remedy this a single-throw switch was installed in each of the cabs, and in series with one of the interlocking wires, so that the sequence of switches could be interrupted as soon as unit switch no. 2 was closed. When either of these single-throw switches was opened, only units nos. 1 and 2 could close, and after the locomotive had taken the strain of the cars the single-throw switch could be closed with the left hand and the unit switches in the group would follow in their proper order. By cutting out the switch group at switch no. 2 instead of at no. 4, the two sets of motors are operated in series at 296 volts instead of at 413 volts. This arrangement is very satisfactory.

The voltages, which are controlled by the eight unit switches, are as follows:

Unit Switch.	Volts.
No. 1	251
" 2	296
" 3	355
" 4	413
" 5	458

THE TORONTO PRESSED STEEL CO. LIMITED

TORONTO, CANADA



Our **SOLID PRESSED BOWL DRAG** and **WHEEL SCRAPERS** are the most satisfactory in the market. They are pressed out of one solid sheet of steel and have no joints or seams.

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PLOUGHS **DUMP CARS**
DUMP WAGONS **DUMP CARTS**
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CEMENT MIXERS **WAGONS**
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PROMPT SHIPMENTS **SEND FOR CATALOGUE**

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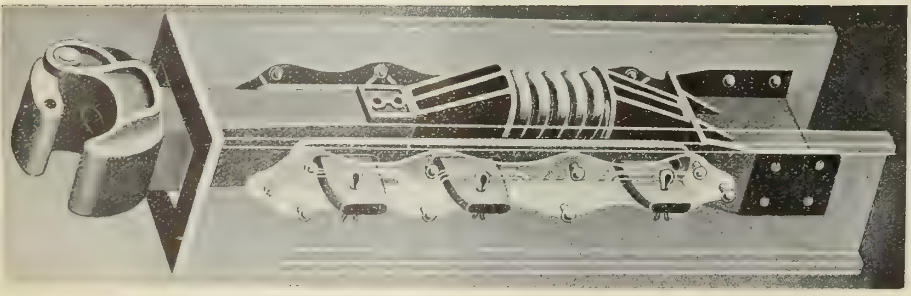

Designed for Wooden or Steel Cars and Engines.

Pulling Strains Distributed Equally on the Three Cross Keys.

Buffing Shocks Distributed on End Sill, Three Cross Keys, Filler Block and Body Bolster. Cannot be Pulled Out or Driven Back and Will Not Spread Sills.

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THE

"CONTRACTOR'S FRIEND"

IN ACTION

THE RAND "LITTLE GIANT," ON THE CONTRACT ILLUSTRATED, PUT DOWN ELEVEN HOLES AT A TOTAL COST OF THIRTY CENTS PER FOOT. THE YARDAGE REMOVED BY THE BLAST WAS, ROUGHLY ESTIMATED, 3,700 YARDS.

ANOTHER CONTRACTOR RECENTLY SUPPLIED US WITH FIGURES ON TWO CUTS MADE BY HIM; ONE WAS HAND DRILLED AND THE **"LITTLE GIANT"** WAS USED ON THE SECOND.

THE SIZE AND ROCK FORMATIONS WERE IDENTICAL AND YET THE MACHINE-DRILLED CUT SHOWED A SAVING OF $15.25 PER DAY, AND DOUBLE THE YARDAGE WAS REMOVED. THESE INSTANCES ARE DESCRIBED IN PAMPHLETS, SENT ON REQUEST.

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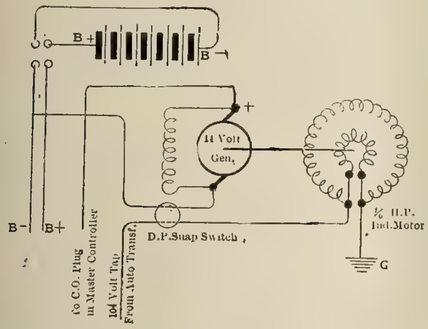
CANADIAN RAND CO. LIMITED
MONTREAL, QUE.
BRANCHES AT:
TORONTO, HALIFAX, WINNIPEG,
VANCOUVER, ROSSLAND, COBALT.

Unit Switch.	Volts.
" 6	517
" 7	561
" 8	620

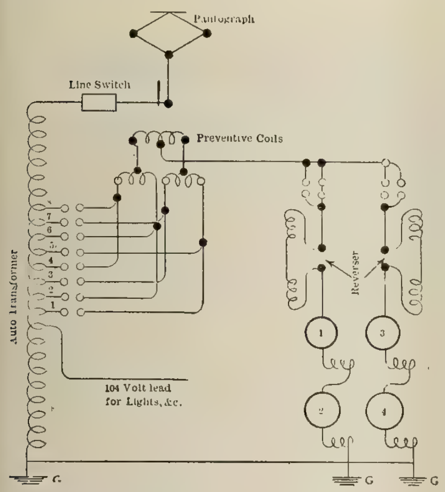
A detailed diagram is presented of the connections to the motor generator and the storage battery, from which it will be noted that the double-pole snap switch breaks the motor as well as the generator circuit. All of the electrical apparatus, except the car motors, is placed inside the locomotive. The storage battery, motor generator, reverser, preventive coils and the switch group are secured to a structure made of 4 x 4 in. angle iron placed in one corner of the locomotive. It was intended to use 1,100 volts in Windsor and 6,600 volts over the rest of the line, and the car equipment was so planned that a change to the lower voltage may be made without altering the equipment.


B+
B−
B−
B+
+
14 Volt Gen.
¾ H.P. Ind. Motor
D.P. Snap Switch
G
to C.O. Plug in Master Controller
104 Volt Tap From Auto Transf.

W.E. & L.S.R.R. LOCOMOTIVE.—SCHEMATIC DIAGRAM.

The auto transformer, which is oil-cooled and of 200-k.w. capacity, is placed in a diagonally opposite corner from the switch group. The line switch is placed immediately above the auto transformer, and is just below the pantograph collector. All the control wiring is in iron-armored conduit.

All the central apparatus of the car, which includes the switch group, reverser, line switch and pantograph, is electro-pneumatically operated. The air compressor, which is driven by a single-phase motor, is placed between the switch group and one of the sliding doors on the side. The car is piped for straight and automatic air, and there are two valves in each motorman's cab. The air governor is bolted to the same rack from which the switch group, etc., are supported.



W.E & L.S.R.R. LOCOMOTIVE.—CONNECTIONS TO MOTOR GENERATOR AND STORAGE BATTERY

At first the locomotive was used to pull gravel trains, and up to the time of writing not more than six loaded flat cars have been hauled at one time. From the ease with which these cars are handled it is probable that 12 flat cars loaded with gravel will make a fair load for the machine. The motors are geared to run the locomotive at a maximum speed of about 35 m.p.h., but it is found to run about 40 m.p.h. on level tangents. The single-phase equipment on this road is giving satisfaction, and as the characteristics of this apparatus are becoming more familiar, keeping up the equipment becomes easier than at first. Some minor troubles, of course, have been experienced, but none of them is an inherent fault in the system, but rather of a mechanical nature and easily remedied.

The Canadian Westinghouse Company has spared no pains in making the operation of the road a success, and as the men are now well drilled in the maintenance of the equipment and inspection is systematically followed, troubles are as few as could be expected on any new system.—S. C. Dewitt, in Electric Railway Journal.

Step	Switches.											
	1								9	10	11	12
1	1	2							9	10	11	12
	1	2	3						9	10	11	12
	1	2	3	4					9	10	11	12
2		2	3	4	5				9	10	11	12
3			3	4	5	6			9	10	11	12
4				4	5	6	7		9	10	11	12
5					5	6	7	8	9	10	11	12

W.E.& L.S.R.R.—Sequence of switches for single-phase locomotive.

◆

Quebec Railway, Light and Power Co.

The 10th annual report for the year ended June 30, 1908, shows the net profits were $87,066.43. Of this $20,000 has been placed to the credit of Accident Insurance account, and the balance, $67,066.43 credited to Surplus account, which now stands at $414,886.15. Considering the financial stringency existing during the year, and the fact that the completion of the new power house and transmission lines was unavoidably delayed, and that no income was received from this source, the directors feel that the results are satisfactory. The new power house, transformer houses and transmission lines, etc., are now practically completed and have been in operation since the close of the year, with very gratifying results, and the directors look forward with confidence to increased profits from this source during the current year.

At a special general meeting of shareholders Nov. 7, 1907, a resolution was unanimously passed authorizing the directors to apply to Parliament for power to issue additional preferred stock to the extent of 5,000 shares of $100 each. A bill in accordance with the resolution was passed by Parliament in June last. Acting under this authority the directors have offered to all shareholders the privilege until Sept. 15, 1908, to subscribe for any portion they may desire of 2,500 shares new preferred stock, at par; the shares to be allotted to the subscribers pro rata should the issue be oversubscribed. The proceeds from the sale of this stock will be used to pay off the floating indebtedness, the whole of which has been incurred in developing the resources of the company. The company's operations during the Tercentenary celebration were successfully carried out, and notwithstanding the crowded state of the streets and the large number of passengers carried, no accident of a serious nature was reported. As the festivities took place after the close of the financial year, the benefits accruing to the company do not appear in the figures of the present statement. The directors learned with great regret that Mr. Methot was unable, owing to ill-health, to continue to act as a member of the board, and were fortunate in securing the services of Mr. Marcoux, to fill the vacancy.

E. A. Evans, Chief Engineer and General Manager, reports on the year's operations as follows:

Citadel Division.—The total number of passengers carried was 6,049,203, an increase of 534,075 over the previous year. The average fare per passenger was 4.22c., as against 4.24c. the previous year, but the income per capita of the population increased from $3.24 to $3.55, still an exceptionally low figure as compared with other cities. The operating expenses of this division have increased from 12.86c. per car mile to 13.64c.; this is principally accounted for by the increased cost of labor and material, representing an increase of nearly ½c. per car mile, and the increased cost of the removal of snow, representing nearly another ¼c. per car mile; the exceptionally unfavorable climatic conditions last winter brought the total cost of snow removal up to $17,380—the highest record since the inception of the road. Six open cars and five closed cars, also five double electrical equipments, have been added to the rolling stock of this division during the year. It having been decided to build a new roof to the car barn of this division, plans were prepared for a steel and concrete roof, so as to render the building more secure from the risk of fire; this work is progressing satisfactorily and will be completed by the end of October. The increased revenue arising from the celebration of Quebec's Tercentenary does not come into this year's operations; during the Tercentenary, viz., from July 21 to 31, both days inclusive, this division carried 679,000 passengers, an increase of 412,000 over the corresponding period last year, the largest number carried in any one day being 74,000. During the year no fatal or serious accidents happened upon this division.

Montmorency Division.—The total number of passengers carried upon this division was 1,398,345, an increase of 163,085 over the previous year. The average fare per passenger was 10.10c. as against 10.40c. last year. Upon the elevator at Montmorency, 239,910 passengers were carried, as against 226,213. The freight business represents 111,001 tons, or 5,826 carloads, an increase of 84,897 tons. The operating expenses have considerably increased, due to a variety of causes, but have certainly, for some considerable time, reached the maximum. The principal causes are: increased cost of labor and material, Government taxes (increased from $10 to $30 a mile) and the running of late trains to and from St. Anne and Quebec during the winter months. There was also a considerable expenditure for the use of foreign freight cars, owing to the company not having sufficient cars of its own; since, however, the division has been provided with 30 additional flat cars received just before the close of the financial year, this expenditure will be very much reduced. During the summer, commencing July 6, a special tourist car, in charge of an efficient guide, has been run between Quebec and St. Anne church, stopping only at Montmorency upon its return, this car has been extremely well patronized, and as a special fare is charged, it has so far proved very remunerative, but the results do not appear in the present statement. It is pleasing to again have to report that there has been no injury of any kind to passengers upon this division, and although there have been a few accidents to employes, the account for injuries and damages is nil. During the Tercentenary, on this division, 98,843 passengers were carried, an increase of 29,342 over the same period of last year; this, as before mentioned, does not appear in the present returns.

Power Division.—The lighting and power division continues to show progress, although the same remarks must apply to this as to the other divisions, viz., that the increased cost of labor and material has had a marked effect upon the operating expenses. The total lighting and power business on June 30, 1908, represented 69,552 incandescent lamps, 1,976 h.p. in motors, 57 k.w. in heating apparatus and 228 arc lamps, exclusive of the power supplied to the other divisions. A contract has been entered into for the supply of 250 electrical h.p. to the Dominion Textile Co. at favorable rates, of which amount 100 h.p. has recently been supplied. The storage battery plant has continued to give every satisfaction and proved of immense value in the successful supply of current to the Citadel division. Good progress has been made in the re-arrangement of the operating of the plant, and the paralleling of the machines is practically completed, only awaiting changes to be made to the street railway generators to fully complete this work. The fireproofing of the buildings belonging to this division will also be fully completed before the end of this year. The new power house and dam at the Natural Steps is now practically completed, and has been handed over to the operating department, but not in time for the revenues to be derived from it to show in the present statement; during the Tercentenary, the generator in this new addition to the company's plant supplied to the city 134,500 k.w. hours of current, to assist the other generators in supplying the large call for current during the illuminations; and the increased revenue due to this division from the celebration will amount to approximately $14,000.

General.—During the year, the buildings, stations, tracks, locomotives and rolling stock, as well as electrical equipment, have been kept in a thorough state of efficiency and repair.

ASSETS.

Road and equipment, real estate, buildings, etc., including Kent House	$6,111,025.81
Cash on hand	4,988.11
Power division—operating account, including accounts due, stores for operating equipment, etc	64,737.22
Kent House—operating account	11,197.37
Citadel division—operating account, represented by stores on hand	14,311.56
Montmorency division—operating account, stores on hand, cash assets, etc.	58,529.53
Accounts receivable	27,331.42
	$6,292,121.02

LIABILITIES.

Capital stock	$2,500.000 00
Bonds	2,500,000.00
Preferred capital stock	500,000.00
Bills payable	192,501.28
Accrued interest account	28,998.03
Accounts payable and other liabilities	95,735.56
Contingent account	40,000.00
Surplus account	414,886.15
Accident Insurance Fund account	20,000.00
	$6,292,121.02

PROFIT AND LOSS ACCOUNT.

Net earnings for year, June 30, 1908			$238,461.05
Less: Interest on bonds		$125,000.00	
Dividend on preferred stock, interest, etc., paid and accrued	$44,371.45		
Interest charged to new dam construction	17,976.83	26,394.62	151,394.62
Net profit 1907-08			$87,066.43
Transferred to Accident Insurance Fund account			$20,000.00
Transferred to Surplus account			67,066.43
			$87,066.43

◆

The following officers of the Dominion Power and Transmission Co. have been elected for the current year: President, J. R. Moodie; Vice-Presidents, J. Dixon, G. B. Blanchard; Secretary and General Manager W. C Hawkins; Treasurer, J. Knox.

New Trails to the
Canadian Game Lands

Before the six railways of the Canadian Northern System followed the old fur trails into the Canadian game lands, only a hardy few dared to go in. But now, the back places of the woods—wealthy in moose, caribou, deer and bear—may be quickly and easily reached. The Canadian Northern system serves a wide range of undisturbed territories. Here are a few suggestions:

The country between Parry Sound and Sudbury, traversed by the CANADIAN NORTHERN ONTARIO RAILWAY, is a land of lonely muskeg and brulé, the native country of the white-tailed deer. From Sudbury north to Sellwood this same line goes in through a moose hunting territory unequalled in Ontario.

The CANADIAN NORTHERN QUEBEC and QUEBEC AND LAKE ST. JOHN RAILWAYS span the native country of the ouananiche, northern brook trout, and the spruce-shored lakes of the Roberval country, where moose and caribou abound.

The eastern shore of Nova Scotia, from Yarmouth to Halifax, is served by the HALIFAX AND SOUTH WESTERN RAILWAY. On the barrens, slightly inland from the railway, are some of the best places for big moose in the east.

THE CANADIAN NORTHERN RAILWAY from Port Arthur to Edmonton, with many branches, griddles almost undisturbed haunts of moose, caribou, deer, wolves, bear, and all species of four-footed and feathered game.

For Information, General and Special, Address the Information Bureau, Canadian Northern Railway, Toronto

IDEAL RAILWAY FENCING

MADE TO LAST

Large gauge (No. 9) hard steel wire is used throughout, decreasing cost of maintenance, insuring durability and serviceability.

IDEAL FENCE has been adopted as a standard by all the leading Railways in Canada. More IDEAL is used by Railways this year than all other makes combined.

Write for Prices and Catalogue

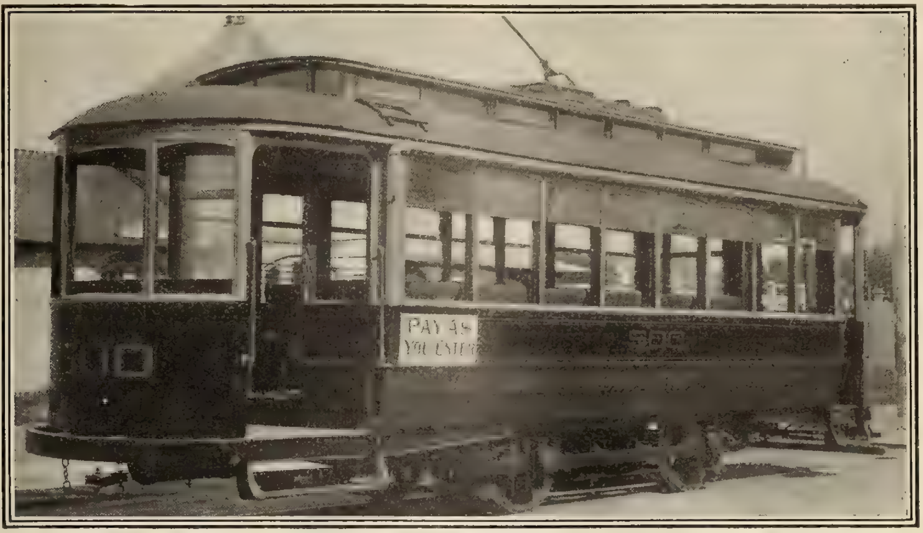
The McGregor Banwell Fence Co. LIMITED
WALKERVILLE, ONTARIO

Ottawa Electric Railway Cars.

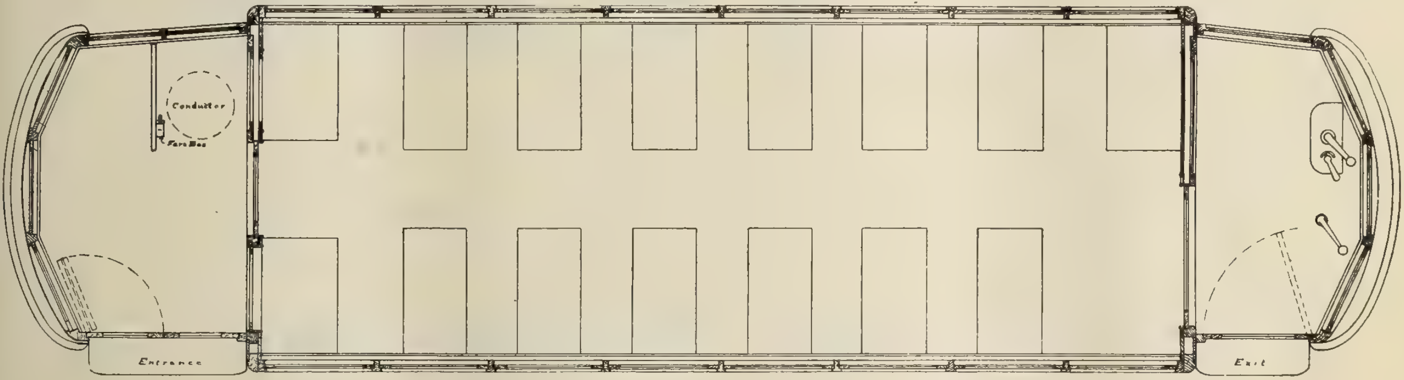
The Ottawa Electric Ry. has had built two semi-convertible pay-as-you-enter cars, of which the following is a general description:

Length of car body	21′ 0″
Length of front vestibule	4′ 0″
Length of rear vestibule	5′ 0″
Projection of bunters	0′ 6″
Length of car over bunters	31′ 0″
Width of car body at bottom	7′ 7¾″
Width of car body at beltrail	8′ 1¾″
Width of car body, inside	7′ 4″
Length of seat	34″
Width of aisle	20″
Seating capacity	30 persons.

Omnibus sides, monitor roof, drop platforms and vestibules; eight double-sash windows in each side of car body with top sash made stationary. Bottom sash drop into pocket in wall of car; vestibule sash also drop. Single swing door on front vestibule and automatic folding doors on rear vestibule. Single sliding doors in bulkheads. Seats stationary, 34″ long, spring upholstered and covered with rattan. Interior finish of car body, cherry. Headlinings three-ply veneer, bird's eye face. Monitor or deck sash arranged to open with special openers. Westinghouse air brakes and hand brakes at front end of car. Emergency brake at rear end of car. The seats are the Ottawa Car Co.'s no. 1 stationary cross seat, 34″ long, spring upholstered and covered with unlined twill weave rattan seating. A polished bronze handle to be provided on each seat back. All side windows are provided with curtains, morocco embossed and mounted on 1¼″ tin barrel shade rollers. Roller top pinch handle curtain fixtures at bottom of side curtains. Curtain rollers are concealed in suitable housings. Front bulkhead window and door are provided with similar curtains to the side ones but fitted with Ottawa Car Co.'s standard fixture. Each car is equipped with an electrical signal bell system, bell in front vestibule with a push button on each side post and one in rear vestibule. Batteries are protected by suitable boxes. Each car is heated with eight cross-seat heaters, complete with three degree intensity switch and cutout. A single truck is used, and the electrical equipment consists of two 30 h.p. Westinghouse 12 A. motors, k. 10 controllers.



OTTAWA ELECTRIC RAILWAY PAY-AS-YOU-ENTER CAR.



OTTAWA ELECTRIC RAILWAY PAY-AS-YOU-ENTER CAR. FLOOR PLAN.

The rear vestibule is large and will accommodate 12 persons. The door in the rear is in the centre of bulkhead. The conductor stands on the rear platform and collects fares before passengers enter. The front or exit door is on the right side of bulkhead, and passengers are requested to leave by this door.

The double gates at the front of the cars are all steel, and prevent passengers from getting off until car has been stopped. The gates are opened by the motorman, who has entire control of same. When closed, they bar the front bulkhead door, thus preventing passengers going into the vestibule and interfering with or crowding the motorman; they also bar the steps and prevent the attempt of anyone trying to get on by way of front door while car is in motion or when stopped. When opened, which is done by the motorman pressing a pedal with his foot, they swing into the vestibule to an angle, making a roomy passage for persons getting off car and still not far enough to interfere with the motorman and his duties. To close the gates the motorman simply pushes them back to place with his hand before starting car.

The cars, which were put in service towards the end of Aug., are giving satisfaction to the company and the public.

OTTAWA ELECTRIC RAILWAY PAY-AS-YOU-ENTER CAR.

Grain Elevator Notes.

The Western Canada Flour Mills Co.'s 35,000 bush. elevator at Shoal Lake, Man., was destroyed by fire Sept. 15.

The Sunny Belt Grain and Elevator Co., Ltd., has been incorporated under the Northwest Territories Ordinance, with office at Lethbridge, Alta.

A grain elevator is under construction at Tugaske, Alta., the present terminus of the new C.P.R. branch running from Moose Jaw northwesterly.

The Weyburn Farmers' Elevator Co., Ltd., has been incorporated under the Northwest Territories Ordinance, with office at Weyburn, Sask.

A press report states that the building of a short line of railway to the Port Colborne elevator is contemplated by the Department of Railways.

The Frontenac Cereal Co., Kingston, Ont., has taken over Moore's elevator there, having a capacity of 500,000 bush., and has organized an independent company to operate it.

The Charles R. Cousins Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $45,000 and office at St. John's, Que., to carry on a general grain business, and in connection therewith to construct or purchase, and operate, elevators, warehouses, steam and other vessels, etc.

Reports received by the grain inspection branch of the Dominion Department of Trade and Commerce, show that 63,882 cars of all kinds of grain were inspected at Winnipeg, for the grain inspection year ended Aug. 31. In the year 1906-07, there were 81,505 cars of grain inspected. Wheat formed the contents of 50,845 cars inspected in 1907-08, against 63,354 cars in 1906-07.

The Lake Erie Grain Milling and Elevator Co., which has been incorporated at Guthrie, Okla., with a capital of $500,000, proposes to erect a large flour mill and grain elevator at Port Colborne, Ont. The provisional directors are: G. M. Kellog, Buffalo, N.Y.; S. T. Patterson, Guthrie; S. T. McColl, and A. C. Mitchell, Port Colborne, Ont. The two latter are at present associated with the Port Colborne Milling Co.

The Canadian Elevator Co. is erecting elevators, each of 30,000 bush. capacity, at Vann, Watrous, Young, Nokomis, Landis, Quinly, Redford and Scott, along the G.T. Pacific Ry., and, it is said, purposes erecting ten more elevators at other points on the line, when suitable locations have been decided upon. It is intended to have the whole number ready to handle this year's crop.

Among elevators which are being erected at various points in the western provinces are: N. Cameron & Co., at Basswood; A. S. Arnold, at Shoal Lake; Northern Elevator Co., at McIntosh's Siding, Man.; Medicine Hat Milling Co., at Grassy Lake; one at Chamberlain; T. S. Matheson and the Northern Elevator Co., at Griffin; W. Stead and Co., at Govan, Sask.; Winson-Leslie Co., at Cory; and the Alberta Pacific Elevator Co., at Gleichen, Alta.

The Atlas Elevator Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $500,000 and office at Winnipeg, to carry on the business of owning and operating grain elevators and warehouses, with power, among other things, to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks, etc. The provisional directors are: T. L. Metcalfe, W. J. Smith, L. J. Elliott, J. S. Cameron, G. A. Metcalfe, Winnipeg.

TORONTO BOLT AND FORGING CO.
LIMITED
Manufacturers of
BOLTS AND NUTS
OF ALL KINDS, INCLUDING
Track Bolts
Track Spikes
Lag Screws
Boiler and
Bridge Rivets
TORONTO — CANADA

The N.L. Piper Railway Supply Co., Limited
314 Front St. West TORONTO, Canada
RAILWAY SUPPLIES
LAMPS AND SIGNALS
LOCOMOTIVE HEADLIGHT

MARINE DEPARTMENT.

Notices to Mariners.

The following have been issued by the Dominion Department of Marine:

No. 78. Aug. 26.—197. British Columbia, Chatham Sound, approach to Prince Rupert, hydrographic notes. 198. British Columbia, North Skeena passage, hydrographic notes.

No. 79. Aug. 27.—199. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Lake St. Peter, curve no. 2, range lights in operation.

No. 80. Sept. 4.—200. Ontario, Lake Ontario, Kingston, light shown from pole on city hall. 201. Ontario, Lake Erie, Pelee Island, removal of wreck Armenia. 202. Ontario, Georgian Bay, Hope Island light station, fog alarm established. 203. Ontario, Lake Superior, east end, Coppermine Point, new tower.

No. 81. Sept. 9.—204. Quebec, Gulf of St. Lawrence, Anticosti, Ellis Bay, range lights only in operation occasionally, caution. 205. Quebec, River St. Lawrence, Ile à la Bague, lighthouse rebuilt. 206. Quebec. River St. Lawrence, ship channel between Quebec and Montreal, Ile Deslauriers back range lighthouse rebuilt. 207. Quebec, River St. Lawrence, chart, Portneuf to Cap Santé, issued.

No. 82. Sept. 10.—208. Ontario, River St. Mary, Sault Ste. Marie canal, upper entrance range lights temporarily extinguished, temporary range lights in operation.

No. 83. Sept. 11.—209. Prince Edward Island, east coast, Cardigan Bay, Panmure Head, fog alarm established. 210. Newfoundland, west coast, Hawke Bay, rocks.

No. 84. Sept. 14.—211. British Columbia Canadian list of lights and fog signals, new edition. 212. British Columbia, Rivers Inlet, schooner passage, rock. 213. United States of America, Washington, Juan de Fuca Strait, Ediz Hook light station, new light structure and fog signal. 214. Japan, Province of Shiribeshi, Otaru harbor, Otaru-Ko, lighthouse established.

No. 85. Sept. 18.—215. Ontario, Lake Ontario, Weller Bay, back range light discontinued. 216. Ontario, Georgian Bay, Meaford, permanent light on breakwater in operation.

No. 86. Sept. 21.—217. British Columbia, Vancouver Island, west coast, Kyuquot Sound, Halibut Channel, Lookout Island, Wigham light replaced by gas-lighted beacon. 218. British Columbia, Vancouver Island, west coast, Kyuquot Sound, Halibut Channel, rock northwestward of Table Island. 219. British Columbia Strait of Georgia, off Gabriola reefs beacon, rock reported.

The following notices have been issued by the U.S. Hydrographic Department:

No. 32. Aug. 8.—1336. Lake St. Clair, Anchor Bay, Clinton River entrance, range lights to be established.

No. 33. Aug. 15.—1387, Lake Huron, Poe Reef light vessel withdrawn from station, gas buoy established.

No. 35. Aug. 29.—1477. St. Mary's River, West Neebish channel opened to navigation.

A. Booth & Co. in Receiver's Hands.

A receiver was appointed Sept. 10 to take charge of the affairs of A. Booth & Co., Chicago, Ill., and subsequently the company filed a petition in bankruptcy. The capital stock of the company is $5,000,000, and it is largely interested in fishery companies operating in Lake of the Woods, Lakes Huron, Superior, Winnipeg, Manitoba and Winnipegosis. Capt. W. Robinson, of Winnipeg, the Managing Director of the allied Canadian company, the Dominion Fish Co., was in Chicago recently in connection with the matter, and it is said that this company will not be affected to any considerable extent, as it is claimed that valuable fishing concessions owned by it will clear any liability which may attach as a result of the failure. The United States and Dominion Transportation Co., operating vessels between Duluth, Port Arthur and Isle Royale, Duluth and the Copper Country, Sault Ste. Marie and Owen Sound, and Sault Ste. Marie and Michipicoten Harbor, is also connected with the Booth Co., but we are informed that its business will not be affected to any extent.

Atlantic and Pacific Ocean Marine.

Capt. Watt, of the Cunard Line s.s. Lusitania, has retired from the service.

The Canadian-Mexican Steamship Line has given notice of a reduction in lumber freight rates to Mexican ports.

The captain of the P. & B. s.s. Sokoto was fined $1,000 at North Sydney, N.S., Sept. 8, owing to two of a cargo of 25 Chinese having escaped from bond.

The Donaldson Steamship Line s.s. Marina ran ashore near Varennes, Que., Sept. 17, and was refloated, after unloading part of her cargo, with practically no damage.

T. Cairns, M.P., founder of the shipping firm of Cairns and Noble, Newcastle, Eng., which recently amalgamated with the Thomson Steamship Line, operating to St. John, N.B., died at Newcastle recently.

The C.P.R. s.s. Lake Michigan grounded at Longstead, near Margate, on the southeast coast of England, Sept. 9. She was released by tugs on the following day, and proceeded to Millwall dock for examination.

The C.P.R. s.s. Mount Temple, after having been practically reconstructed, sailed from Montreal for London and Antwerp, Sept. 2, with Capt. Griffiths in command, Capt. Boothby, R.N.R., having resigned.

The Quebec Steamship Co. is reported to be negotiating for the purchase of the s.s. Prince George, at present on the Dominion Atlantic Ry.'s Yarmouth-Boston route, with a view to placing her on the Bermuda run.

The Dominion Line s.s. Southwark, which grounded in Belle Isle Straits, Aug. 10, and after being released continued her voyage to Liverpool, Eng., has been replaced by the Vancouver while the necessary repairs are undertaken.

The Cunard Line s.s. Mauretania, en route to New York, broke one of her propeller blades Sept. 16. Temporary repairs were undertaken at sea, and she proceeded on her voyage with comparatively little loss of time, arriving at her dock Sept. 19.

The Canadian-Mexican Steamship Co., of British Columbia, announces that by the completion of the Tehuantepec Rd., from Salina Cruz to Puerto Mexico, it is now prepared to accept freight for Great Britain, by that route, connecting with the various Atlantic steamship lines trading from Puerto Mexico.

Representatives of the various steamship companies operating in the trans-Pacific service are reported to have agreed on a new schedule of rates, at a conference held at Seattle, Wash., Sept. 10. It is stated that the rates agreed on are much higher than hitherto, but that the benefit will accrue to the connecting railway lines rather than to the steamship companies.

Manchester Liners Ltd. has announced that from Sept. 5 to the close of navigation, a weekly service will be run between Montreal and Manchester, Eng., and if the results justify it, weekly sailings will be continued next season. Three new vessels are to be introduced to the service, named respectively Manchester Exchange, Manchester Inventor and Manchester Engineer.

H. C. Walrond, of the Canadian-Mexican Steamship Line, was in Victoria recently for the purpose of dealing with the local complaints against the service, and was in consultation with the Board of Trade council and various shippers on the subject. It is understood that the grievances have been removed, and arrangements made for the general betterment of the service.

The Imperial Fruit Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $49,000, and office in Montreal, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels in Canada, the Bahamas and West Indies. The provisional directors are: D. W. Campbell, F. Fowler, I. Hibbert, J. Wallace, R. C. Barry, Montreal.

The steamship companies carrying passengers into Canada are complaining as to the regulations respecting immigrants, claiming that considerable inroads have been made in their businesses. During the past season a regulation providing that each immigrant be in possession of $25 was put into force, and this it is claimed prevented a large number of passages from being booked. It is now announced by the Immigration Department, that the amount each immigrant must have on landing shall be $50 during Jan. and Feb., generally the two busiest months of the year.

The Allan Line s.s. Corinthian and the Head Line s.s. Malin Head collided off Grosse Isle, during a dense fog, Sept. 12. Both vessels were considerably damaged, the Malin Head having to be beached to save her foundering. The Corinthian returned to Quebec, where she was docked for repairs; but it is stated that only temporary repairs will be undertaken to allow of her crossing the Atlantic to Glasgow, Scotland, where permanent repairs will be made. The Corinthian's passengers were transferred to the same company's s.s. Corsican at Quebec, and sailed for England Sept. 18. The Malin Head will, it is understood, be taken to the U.S. as soon as possible for repairs. An enquiry into the causes of the collision was opened at Quebec, Sept. 25, before Commander O. G. V. Spain, R.N.

The Usher Steamship Co.'s s.s. Usher has recently completed what is purported to be the longest single voyage and the greatest distance which coal has been transported for bunker purposes. She sailed from Newport News, Va., June 11, for Auckland, N.Z., with coal for the U.S. fleet, arriving there Aug. 21, and having missed it there, followed it to Melbourne, Australia, arriving there Sept. 2, when it was found that the vessels were not then requiring coal, and she was ordered to take the coal to Manilla, Philippine Islands. The s.s. Usher, which has recently been placed on the Canadian register, was built at Glasgow, Scotland, in 1901. She is a screw-driven vessel with engines of 310 n.h.p., her dimensions being: Length, 340 ft.; breadth, 46.5 ft.; depth, 25.7 ft.; tonnage, 3,594 gross, 2,350 register. The headquarters of the company are at Chegoggin, and the vessel's port of registry, Yarmouth N.S.

Maritime Provinces and Newfoundland.

The Public Works Department will receive tenders, Oct. 5, for the construction of an extension to the wharf in West St. John harbor, N.B.

A schooner named Archie Crowell, of 2,000 tons, was launched at Shelburne, N.S., Sept. 9. Her dimensions are: Length, 118 ft.; breadth, 27 ft., with 86-ft. keel.

The Dominion Coal Co.'s s.s. Pors, which was stranded near Port Hastings, N.S., early in Sept., was subsequently refloated and taken to Halifax and docked for repairs.

SUBMARINE SIGNALS

Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says:

"Nearly all my sea life I have been looking forward to getting the assistance of a reliable sound signal. Now I feel that we have got it, and all that is required, in my opinion, is its universal application."

Full Particulars on Application to the

Submarine Signal
COMPANY

BOSTON, MASS.

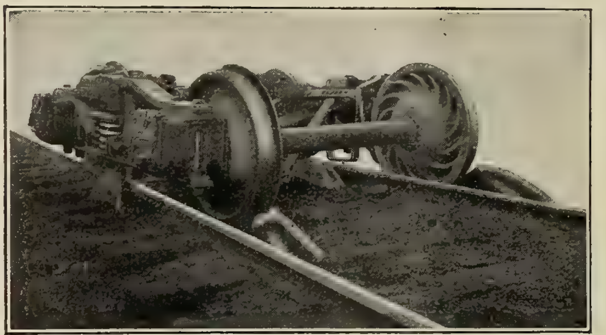
THE INTERNATIONAL MARINE SIGNAL CO.
OTTAWA, CANADA

MANUFACTURERS OF

Automatic Acetylene Gas Buoys, Beacons and Fog Signals.

Mariners describe our lighted buoys as "floating lighthouses."

The Alexander Car Replacer



60,000 PAIRS IN USE.

Manufactured at
Montreal, Que., and
Scranton, Pa.,
of Pressed Steel Plate, and guaranteed to re-rail heaviest equipment.

SOLD BY
F. H. HOPKINS & CO. and MUSSENS LIMITED, MONTREAL

Greening's Steel Wire Chain

If you are interested in Chains examine carefully perfect mechanical construction of Greening's. It is the most perfect Chain made. We make it in 13 sizes. Correspondence solicited. We send cuts with table of breaking strain, samples, etc., upon request.

THE B. GREENING WIRE CO., LIMITED
HAMILTON, ONT. MONTREAL, QUE.

The Inverness Ry. and Coal Co. is reported to have laid off the steamships Bloomfield and Kilkeel on account of the scarcity of miners and laborers due to harvesting operations.

The Red Cross Line's s.s. Venetia has been withdrawn from the St. John's, Nfld., Halifax and New York route, and the service reduced from a weekly to a fortnightly one, the s.s. Rosalind being utilized for that purpose.

The Lunenburg, N.S., schooner H. R. Silver arrived at Halifax, N.S., Sept. 18, after a long voyage, during which the crew deserted on two occasions. She was brought into port by a temporary crew shipped in the West Indies.

Capt. P. McMahon, of Charlottetown, P.E.I., died at Oakville, Ont., Aug. 26, from injuries received while superintending the erection of a wharf for the Port Credit Brick Co. (Haney & Miller). The body was taken to Charlottetown for interment.

The following are the officers of the Canada Atlantic and Plant Steamship Co. (Plant Line), for the current year: President, A. W. Perry; Vice-President, McC. Grant; Treasurer, H. G. Perry; Secretary and Eastern Manager, H. L. Chipman; Auditor, R. C. Verner.

The Minister of Public Works announced at St. John, N.B., Sept. 3, that it had been decided to send representatives to New York for the purpose of securing floating grain elevators for use in St. John harbor. The Public Works Department has agreed to pay the cost of towage.

The Public Works Department has awarded the contract for the construction of a wharf and warehouse at Port Hastings, N.S., to W. J. Landry, Antigonish, for $10,550, and for the construction of a wharf at Macpherson's Cove, N.S., to Reid and Archibald, Halifax, for $3,973.

The Newfoundland s.s. Regulus and the s.s. Ocland collided near Sydney, N.S., Sept. 18, the Ocland having a large hole cut in her port side, while the Regulus was considerably damaged in the bows. A press report states that the owners of the Ocland have commenced proceedings to recover $25,000 damages from the owners of the Regulus.

The borings in Courtney Bay, St. John, N.B., undertaken to ascertain the condition of the sub-strata, preparatory to arriving at a decision to construct wharves in connection with the proposed National Transcontinental Ry. terminal there, have been completed by the Public Works Department's engineers, who will report in due course.

Referring to a recent complaint to the Government by schooner owners, as to the delay to which they are subjected at coal shipping ports, the Dominion Coal Co. states that it has during the present shipping season loaded 433 schooners with 53,000 tons; the average detention being less than 2 days, while in some cases it was only 3 hours.

Announcement was made Sept. 18, that the C.P.R. Atlantic Steamship Line and the Donaldson Steamship Line had entered into an agreement with the St. John, N.B., Longshoremen's Association, as to the pay for unloading and loading their steamships at that port. The rate is fixed at 30c. an hour for the winter, and 35c. an hour in the summer, with double pay for work on Sundays and public holidays.

K. & V. Nordin, Ltd., has been incorporated under the New Brunswick Joint Stock Companies Act, with a capital of $20,000, and office at Campbellton, to carry on a general lumbering business, and in connection therewith to own and operate vessels of all descriptions, wharves, etc. The provisional directors are: L. W. Just, Montreal; K. Nordin, J. Ander, Newcastle; A. R. Wilkinson, Ashburnham, Mass., U.S.; V. Nordin, Helsingborg, Sweden.

The Department of Trade and Commerce will receive tenders until Jan. 2, 1909, for a steamship service between Pictou, N.S., and the Magdalen Islands, for the carriage of mails, freight and passengers, calling on each trip each way at Souris, P.E.I., and ports in the Magdalen Islands as follows: on all trips at Amherst Island, Point Bosse and Grindstone Island; and at Etang du Nord and Grand Entry once each week; such weekly calls to be made on alternate trips, and once each month during June, July, Aug., and Sept., during each year of the contract, at Bryan Island, and at Etang du Nord when weather permits. The service is to begin April 8, 1909.

Province of Quebec Marine.

The s.s. Gustav Adolf, which ran ashore on Goose Island Sept. 6, was released Sept. 9, and proceeded to Levis under her own steam. The damage was very slight.

The north and south ferry boats between Quebec and Levis were in collision during a dense fog Sept. 22, the latter vessel sustaining considerable damage to her bows above the water line.

The contract for the construction of a breakwater up to the Louise embankment in the St. Charles River, Quebec, has been awarded to E. Dussault and Sons, Quebec, for $750,800.19.

The Richelieu and Ontario Navigation Co.'s steamboat Murray Bay broke a piston in the Saguenay River, Aug. 30, necessitating the transfer of her passengers to another vessel. She was subsequently towed to Sorel and the necessary repairs effected.

Several ocean-going vessels were detained at Montreal and Quebec, Sept. 18, owing to the dense smoke and fog which overhung the river and harbors. A general clearing of the air, however, allowed them to depart on Sept. 19. A similar condition prevailed again Sept. 22, and the various vessels on the Montreal-Quebec route were detained in their respective ports.

The St. Lawrence Stevedoring Co., Ltd., has been incorporated under the Quebec Companies Act, with a capital of $100,000 and office at Quebec, to take over the stevedoring, discharging, loading and unloading plant for vessels, of the Canadian Import Co., and to carry on such business, with power to own and operate steam and other vessels. The provisional directors are: L. C., A. D., and M. T. Webster, W. Q. Stobo, H. Aird, Quebec.

A company is reported to be organizing for the purpose of constructing dry docks at Montreal, St. John, N.B., and at other ports in Canada. It is said that a site for a repair dry dock has been selected in Montreal. The names of R. Bickerdike, Montreal, and J. F. Stephens, New York, are mentioned in connection with the proposed company, the name of which is given as the National Dry Dock and Shipbuilding Co., and the capital stock as $50,000,000.

The Department of Public Works is considering tenders for dredging work on the Richelieu River between St. John's and Lake Champlain, Que. The work to be done will provide a clear navigable channel, and regulate the levels between the two points named. The dredging is estimated to cost about $90,000, and the construction of a stop-log dam 1,350 ft. long is estimated to cost $110,000. The result of this work will be to lower the crest of the rapids at St. John's by almost five feet, to raise the level of the water in the Chambly canal, and incidentally to prevent flooding along the valley of the Richelieu River. (See The Lake Champlain Route, Sept., pg. 681.)

Members of the Canadian Manufacturers' Association, at the invitation of the Commissioners, inspected the Montreal harbor and works Sept. 16, when G. W. Stephens, Chairman of the Commission, in placing statistics, etc., before them, pointed out that Montreal does more business than any other port in North America, and more than any in Great Britain, with the exception of London and Liverpool. Referring to the lighting and buoying of the St. Lawrence channel, he remarked that owing to the improvements that had taken place, the insurance rates on cargoes and hulls had been reduced 100% in 5 years. We presume that what he meant to convey was that 5 years ago the insurance rate was 100% higher than at present. If so, the reduction which has taken place from the rate then existing is 50%. A reduction of 100% would wipe out the rate entirely.

Ontario and the Great Lakes.

J. C. Parsons, a well-known lakes captain, died at Goderich recently.

P. Deslaurier, tug owner, Port Arthur, Ont., was found drowned in Thunder Bay, off that city, Sept. 7.

The Hamilton Steamboat Co. will, it is said, build a steamboat to add to its fleet for next season's traffic.

The contract for the permanent repairs to the Cornwall Canal has been awarded to T. A. Nicholson, St. Catharines, Ont.

The Hamilton City Harbor Committee has recommended the granting of a 10-years' lease of the city dock to the Mutual Steamship Co.

The contract for the construction of two breakwaters in Cobourg harbor has been awarded to the Randolph Macdonald Co., Toronto.

The Dominion Transport Co.'s steamboat Telegram is undergoing repairs at Collingwood, after grounding on Jackson's shoal early in Sept.

The construction work on the wharf at Lakefield, Ont., was announced to start towards the end of Sept., and it is hoped to have it completed this fall.

The Kingston schooner Acacia, which ran ashore at Sackett's Harbor, N.Y., July 8, has been floated and towed to Kingston, where she will probably be repaired.

The Detroit and Cleveland, and the Detroit and Buffalo Navigation Cos., announce that their Detroit and Mackinac vessels will make Goderich a port of call next season.

The s.s. City of Chatham, which has been operating on the Chatham-Detroit route, was changed Sept. 16, and placed on the run between Kingsville and Pelee Island.

R. Goldring, captain of a Whitby schooner, was presented with the Royal Canadian Humane Society's medal recently, for the rescue of two men in Lake Ontario, July 1.

The contract for the widening of the deep water channel along the west pier of the Port Colborne entrance of the Welland Canal has been awarded to M. J. Hogan, Port Colborne.

The Mutual Steamship Co.'s s.s. Acadian, and the Montreal Transportation Co.'s s.s. Westmount, have had their repairs completed and are again in service between Fort William and Montreal.

The Otonabee Navigation Co. will probably add two vessels to its fleet next season. The frame of an 85-ft. vessel has been purchased, also an engine, and construction is in progress at Peterboro.

The Marine Department has issued a notice cautioning up-bound vessels to slacken speed in passing Stag Island in the St. Clair River, owing to the Government lighthouse work in progress there.

Capt. Dunn, commander of the Dominion Government cruiser Vigilant, has retired from the service, and is succeeded by Capt. P. C. Robinson, formerly first officer of the Government cruiser Curlew.

Capt Roys, of the steamboat Aletha, was charged at Belleville, Sept. 14, with carrying more than the legal number of passengers on three occasions. The case was adjourned owing to the absence of witnesses.

Haney and Miller's steam barge Resolute, which was wrecked about two years ago off Toronto, and which was recently raised and overhauled, has again been put into service, and her name changed to J. Ralph.

A press report states that a marine railway and repair shops are to be constructed at Midland shortly, capable of dealing with the larger lake vessels. R. Morrill, Collingwood, is said to be interested in the matter.

A rumor is current in Toronto to the effect that negotiations are in progress for the amalgamation of the Turbine Steamship Co. and the Hamilton Steamboat Co., but officials of both companies have stated that there is no foundation for it.

The Algoma Central Steamship Co.'s steamboat King Edward ran on a reef at Chantry Island, Sept. 5, and was released Sept. 13, and taken to Collingwood, where she will be repaired. She was built at Glasgow, Scotland, in 1891.

The Montreal Transportation Co.'s s.s. Westmount, which recently grounded in the Sault River, arrived at Collingwood early in Sept., and went into dock for repairs. The damage sustained to the bottom of the vessel was more serious than anticipated.

The sloop Viking, owned by Capt. F. H. Mitchell, Oakville, Ont., and registered at Port Dover, has been sold to D. McLeod, Newcastle, and will be used between north shore ports and Toronto. Capt. Mitchell is reported to have bought the schooner Katie Eccles, registered at Napanee.

The s.s. Argyle has been sold by the liquidator of the Lake Ontario Navigation Co. to Hutchison and Son, Toronto, for $12,500. She was built at Picton, Ont., in 1899, and is a paddle-wheel steamer, with engine of 274 n.h.p. Her dimensions are: Length, 185.1 ft.; breadth, 26 ft.; depth, 9.7 ft; tonnage, 700 gross, 374 register.

Capt. W. J. Bassett has returned to Canada from Great Britain, after seeing the Western Steamship Co.'s s.s. J. A. McKee sail on her trip across the Atlantic, with a cargo of coal for St. John's, Nfld. After unloading there, she will proceed to Sydney, N.S., to load steel rails for Fort William. We have already published a description of this vessel.

The Lake Superior Gold and Copper Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $8,000,000 and office in Toronto, and power among other things to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks and elevators, etc., and to carry on a general elevator, navigation and transportation business.

The Inland Navigation Co.'s s.s. Neepawah, which grounded on a shoal near Otter Head, in Lake Superior, recently, has been released and was taken to the Ecorse dry dock, where after a survey had been made and matters between the owners and underwriters adjusted, repairs were commenced. A number of plates and frames will be removed and it is expected that repairs will be completed early in Oct.

A case came up at Osgoode Hall, Toronto, Sept. 11, in which the Turbine Steamship Co. claimed damages, as the result of a collision with the once famous Knapp roller boat, which broke from its moorings at the Polson Iron Works yards last fall, during a storm. The defence then filed raised the question as to whether the Knapp roller boat was a ship

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Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00	per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00	" "
Map No. 5—South-Western Alberta	8.00 to 15.00	per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00	per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians...	10.00 to 25.00	per acre

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"	"	10.00	"	"	239.70	"	"	"	81.62	"	"	200.00
"	"	11.00	"	"	263.60	"	"	"	89.78	"	"	220.00
"	"	12.00	"	"	287.60	"	"	"	97.96	"	"	240.00
"	"	13.00	"	"	311.55	"	"	"	106.10	"	"	260.00
"	"	14.00	"	"	335.60	"	"	"	114.32	"	"	280.00
	"	15.00	"	"	359.50	"	"	"	122 44	"	"	300.00

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F. T. GRIFFIN, Land Commissioner, Winnipeg.

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within the meaning of the Act. The trial was fixed to take place at the end of Sept.

The Calvin Co.'s steamboat Simla is unique in being the first Canadian owned vessel to convey freight between U.S. ports without being liable to the penalty of seizure under the U.S. coasting regulations. She was bound to Deseronto with ore, and while en route, the smelter, for which the ore was intended, was destroyed by fire. Permission was obtained from Washington to unload her at Buffalo, to save her returning to Sault Ste. Marie, Mich.

Press reports state that the Turbine Steamship Co. purposes building another turbine steamer for the Toronto-Hamilton route, and that the order will be placed in Canada, the turbines being imported from Great Britain. It is said that tenders have been submitted to the company for the construction of a similar vessel to the Turbinia, but 65 ft. shorter and 8 ft. less in width, with accommodation for 1,000 passengers. The name of the proposed vessel is given as Eatonia, and the approximate cost is placed at $150,000.

In our Sept. issue we announced that the Northern Navigation Co.'s steamship, now under construction, was to be named Pacific. On application to the Marine Department for the registration of this name the company was informed that as there were already two vessels on the register bearing that name, and as a regulation had recently been passed respecting the duplication of names, that name could not be registered. The company has, therefore, decided to name the vessel Hamonic, in honor of its President, H. C. Hammond.

The lake survey reports for August show the levels to have been as follows, in feet above tidewater: Superior, 602.98; Michigan and Huron, 581.70; Erie, 573.13; Ontario, 247.95. The level of Lake Superior is about the same as the average August stage for the past ten years, while Michigan and Huron are 7½ inches above, Erie 6½ inches above, and Ontario 21 inches above, which is the highest August stage since 1870, when it was ¼-inch higher. The estimated fall during September was: Michigan and Huron, 1¾ ins.; Erie, 3¼ ins.; Ontario, 4½ ins.; while Superior, it was estimated, showed rise 1½ ins.

The Great Lakes Steamships Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $250,000 and offices at Toronto, to build or otherwise acquire and operate vessels of every description, wharves, docks, warehouses, dry docks, elevators, etc., and to carry on a general transportation business by land and water. The provisional directors are: R. L. D. Taylor, H. L. Dunn, A. R. Cochrane, M. E. Cherrier, E. L. Bradley, Toronto. We are informed that the company is negotiating for the construction of three vessels at Tyne shipbuilding yards, England, orders for which will probably be placed next spring.

The Montreal Transportation Co.'s s.s. Kinmount, which was launched at Glasgow, Scotland, recently, is of the customary lake type and full Welland Canal size. She has triple-expansion engines with cylinders 18, 30 and 48 ins. diar., by 33 ins. stroke, supplied with steam from two single-ended boilers, 12 ft. 6 ins. by 11 ft. 4 ins., at 185 lbs. working pressure. She is built to the British Board of Trade Classification, with all the most recent improvements for vessels of her class. Her dimensions are: Length, 256 ft.; breadth, 43 ft.; depth, moulded, 25 ft. She has sailed for Canada, with a cargo of ingot moulds for the Dominion Iron and Steel Co., Sydney, N.S., where she will load rails for Fort William, Ont., and is expected to arrive early in October. The remainder of the season will be filled on the Fort William-Montreal route, and after the close of the river season, she will probably make a few trips to Georgian Bay ports.

Manitoba, Saskatchewan, Alberta, Etc.

A deputation recently waited on the Saskatchewan Premier to urge the necessity of establishing a ferry across the Saskatchewan River at Fielding. The Premier is reported to have said that such a ferry would be arranged for at an early date.

The contract for the construction of the movable dam, steel service and highway bridge, etc., across the St. Andrew's Rapids, near Winnipeg, has been awarded by the Dominion Public Works Department to the Canada Foundry Co., Toronto.

An unconfirmed press report says that the Dominion Government has sent an engineer to supervise the work of straightening the channel of the Assiniboine River, and that it is proposed to eliminate as far as possible the sharp bends between Winnipeg and Portage la Prairie, Man.

An enquiry into the causes of the wreck and burning of the s.s. Premier on Lake Winnipeg, Aug. 5, was opened before Commander O. G. V. Spain, R.N., and Commissioner Perry of the Royal Northwest Mounted Police, at Winnipeg, Sept. 1, and closed Sept. 9. Judgment had not been delivered at the time of going to press.

B.C. and Pacific Coast Marine.

Capt. Murray Thain, at one time harbormaster at Vancouver, died there Sept. 10.

The name of the s.s. Volga, recently acquired by the B.C. Government, has been changed by order-in-council to Shuswap, and will be registered at Vancouver.

N. Thompson & Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $10,000, with power among other things to build, lease, control and operate dry docks, shipyards and ships.

The old stern-wheel steamboat Strathcona, which it was recently intended to use on the Skeena River to convey blasting powder to G.T.P. Ry. contractors, has been overhauled and is being run as a pleasure boat, the original idea having been abandoned.

The paddle-wheel steamboat Caledonia, being utilized on the Skeena River by Foley Welch and Stewart, in their G.T. Pacific Ry. contract work, struck on a rock in the Skeena River recently and sank. She was subsequently floated and beached for repairs.

The B.C. Ferro-Concrete Pile Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $100,000, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks, etc., for its business.

The Capilano Timber Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $300,000, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels, or to acquire shares therein, and to let out same on hire.

The John Murray Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000 and power, among other things, to own and operate steam and other vessels, wharves, docks, etc., and to act as warehousemen and carriers of goods and passengers.

The Vancouver-Wyoming Oil Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $150,000, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels, and to act as common carriers by land and water.

The White Pass and Yukon Ry. officials stated recently that the last boat from White Horse, on the Yukon route, would probably leave there Sept. 30, and that freight leaving B.C. ports after Sept. 15, might be detained at White Horse during the winter owing to the closing of navigation.

Rear-Admiral Kingsmill visited Esquimalt early in Sept., on a trip of inspection, with the view, it is said, of an arrangement being arrived at between the Imperial and Dominion Governments, for the utilizing of the port by the latter as the Canadian fleet's headquarters on the Pacific coast.

An order-in-council has been issued revoking the license granted to C. W. R. Cleminson, Nov. 29, 1907, to operate a ferry across the Okanagan Lake, between Summerland and East Summerland; and the B.C. Government received, up to Sept. 26, applications for a charter for a ferry to ply between the points named, about 2¾ miles, up to June 30, 1910.

The Prince Rupert Transfer and Storage Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $10,000, to carry on the business of transferring and storing of goods by any means, and to construct, lease or otherwise acquire tramways, ferries, wharves, docks, elevators, and all or any means of transportation expedient in the company's interests.

The Dominion Public Works Department's plans for the improvement of New Westminster harbor and the ship channel to the Fraser River, provide for expenditure during 1909 approximately as follows: Construction of a deep water dredge, $300,000; building of a jetty about 3 miles long, $200,000; and dredging, $110,000. Dredging work will be undertaken to make the channel and harbor suitable for vessels having 25-ft. draught, and several sharp curves will be straightened out. It is estimated that the total cost of the work will be $1,250,000.

The C.P.R. steamboat Transfer, registered at Victoria, which is reported to have been sold to the G.T. Pacific Ry. for use as a supply boat on the Skeena River, was built at New Westminster in 1893. She is a paddle-wheel steamer with engine of 18 n.h.p., her dimensions being: Length, 122 ft.; breadth, 24.5 ft.; depth, 5.6 ft.; tonnage, 264 gross, 98 register. Since the foregoing was put in type, we have been officially advised that there is no foundation for the report that the G.T. Pacific Ry. has purchased a steamer from the C.P.R., for operation on the Skeena River.

The Kingston-Titania Collision.

Capt. F. L. R. Pope and J. G. Schumacher, Local Inspectors at Buffalo, N.Y., of the U.S. Steamboat Inspection Service, have given the following decision: "After carefully reviewing the testimony taken in the investigation of the collision between the steamers Titania (American) and Kingston (Canadian) at the entrance to Charlotte, N.Y., harbor on the night of Aug. 11, 1908, at about 10.30 o'clock, we find that both steamers were approaching the harbor of Charlotte, the Titania from Sea Breeze, N.Y., and the Kingston from Kingston, Ont., the Titania bearing from the Kingston about four points on the port bow, and the Kingston bearing from the Titania about three points on the starboard bow. The signal lights of each steamer were plainly visible to the pilot of the other when three or four miles apart, with plenty of room in which to manœuvre, and with nothing in the condition of wind or weather to render navigation difficult. No signals were given by the pilot of either steamer, covering a situation of this kind, as required by Rule X of the Government Pilot Rules, which reads:

"'When two steamers are approaching each other at right angles or obliquely so as to involve risk of

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collision, other than when one steamer is overtaking another, the steamer which has the other on her port side shall hold her course and speed: and the steamer which has the other on her starboard side shall keep out of the way of the other by directing her course to starboard so as to cross the stern of the other steamer, or, if necessary to do so, slacken her speed or stop or reverse. The steamer having the other on her own port bow shall blow one blast of her whistle as a signal of her intention to cross the bow of the other, holding her course and speed, which signal shall be promptly answered by the other steamer by one short blast of her whistle as a signal of her intention to direct her course to starboard so as to cross the stern of the other steamer or otherwise keep clear of her.

"'If from any cause whatever the conditions covered by this situation are such as to prevent immediate compliance with each other's signals, the misunderstanding or objection shall be at once made apparent by blowing the danger signal, and both steamers shall be stopped, and backed if necessary, until signals for passing with safety are made and understood.'

"The preservation of life and property depends largely upon a strict observance of the rules for the government of pilots, and those entrusted with the care of ships should understand that they must be enforced with uniform and absolute certainty. It also appears from the testimony that both these steamers entered the harbor at a rate of speed estimated at from 12 to 15 miles an hour, which was reckless and unskilful navigation in the circumstances and conditions surrounding this particular situation, and much in excess of the rate of speed allowed in harbors by the government regulations.

"In view of the facts set forth in the testimony, we find that the pilots of both steamers were at fault in not observing the pilot rules; and under the authority conferred upon us by sec. 4,450, revised statutes, we hereby suspend the license of Patrick Thorpe, master and pilot of the steamer Titania, for six months, beginning Sept. 5, 1908.

"The master and pilot of the steamer Kingston, being a British subject, he does not come under the jurisdiction of the disciplinary power conferred upon local inspectors by the United States laws."

◆

St. Lawrence Insurance Reductions.

The Minister of Marine, in addressing a political meeting at Sorel, Que., recently, spoke of the work done on the St. Lawrence channel, referring particularly to the dredging and lighting. Speaking of the reductions in insurance he said: The following are the figures from 1900 to 1907:

	Provisions and Merchandise.	Grain.
1900	84½c.	99c.
1901	63½c.	78c
1902	55½c.	78c.
1903	49c.	56c.
1904	43c.	50c.
1905	37c.	41c.
1906	45c.	45c.
1907	38c.	38c.

These figures constitute a reduction of 54½% on the produce in the first category and of 60% on that of the second. The tonnage of the vessels amounts to 386,837 tons, giving a total value, calculated at $60 a ton, of $23,210,220. The average rate of insurance is about 4% of a total of $928,408. Seven years ago, the average rate being then 5%, would have represented on these boats $232,000 more than to-day. During the last fiscal year the total amount of goods carried by the St. Lawrence route was more than $150,000,000. Insuring these on the lowest rates of 1900, the result would be a total in insurance of $1,260,000. Insured at last year's rate—that is to say, at 38c. per $100—the result would be $570,000, or a saving in the cost of insurance of $690,000. To this saving add the saving effected on the boats, and we have a total reduction in the cost of insurance of $922,000. Hence it will be seen that the advantages which have been accorded to trade by the improvements to the route cover and exceed in the one item of insurance the interest on the cost of the improvements to the channel. Now, the amount spent on the St. Lawrence ship channel is $10,107,038.28, which, calculated at 4%, would give an interest of $404,280. Hence it will be seen that the advantages which have been accorded to trade by the improvements to the route cover and exceed in the one item of insurance the interest on the cost of improvements to the channel by $517,720.

The reports of Mr. Brodeur's speech in the daily press were so evidently erroneous that we asked him to favor us with a verbatim report of what he said, which he kindly did as above given.

◆

Vessels Removed from the Register. The following vessels were removed from the Canadian register during Aug. for the reasons assigned; steam, Arcola, St. John, N.B., 1,651 tons, stranded; Mizpah, Toronto, 12 tons, broken up; Victorian, Victoria, B.C., 809 tons, sold to foreigners; sailing: Bessie, Sydney, N.S., 20 tons, wrecked; Drummuir, Victoria, B.C., 1,798 tons, sold to foreigners; Ella B., Halifax, N.S., 62 tons, broken up; Foam, Chatham, N.B., 10 tons, broken up; G. S. Troop, Lunenburg, N.S., 98 tons, sold to foreigners, Hiawatha, Shelburne, N.S., 66 tons, lost at sea in 1885; Inga, Lunenburg, N.S., 161 tons, transferred to Barbados; Stella Matutina, Quebec, 75 tons, out of existence; Windsor Packet, Windsor, N.S., 66 tons, broken up

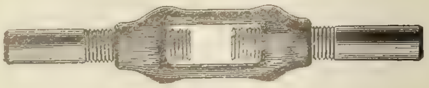
LIST OF STEAM VESSELS REGISTERED IN CANADA DURING AUG., 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
Bayette	126,207	Vancouver, B.C., 1908	Screw 1 N.H.P.	24.0	7.5	....	53	2	Vancouver, B.C.	C. A. R. Pryce and J. Morris, Vancouver, B.C.
Cowichan	126,210	Ayr, Scotland, 1908	" 151 "	157.1	32.1	13.5	962	520	"	Union Steamship Co., Ltd., Vancouver, B.C.
Farquhar	126,205	Vancouver, B.C., 1908	" 16 "	63.3	16.8	8.0	72	49	"	Rat Portage Lumber Co., Ltd., St. Boniface, Man.
Francis W.	126,051	Collingwood, Ont., 1908	" 9 "	59.0	16.0	8.0	43	41	Owen Sound, Ont.	Owen Sound Dredge and Construction Co. Owen Sound, Ont.
Kitimac	126,260	Vancouver, B.C., 1908	" 2 "	43.0	9.3	4.8	18	12	Vancouver, B.C.	J. W. Chappell, M.O., Vancouver, B.C.
Le Flottant	126,158	Bout de l'Ile, Que., 1908	" 1 "	49.4	10.3	6.7	22	15	Montreal	A. Archambault, Bout de l'Ile, Que
Limit	126,209	Vancouver, B.C., 1908	" 6 "	46.0	10.2	4.8	24	16	Vancouver, B.C.	E. L. Kinman, Vancouver, B.C.
Leola	126,176	N. Westminster, B.C., 1908	" 9 "	24.8	6.6	2.7	3	2	N. Westminster, B.C.	D. Murchie, New Westminster, B.C.
Nanoose	122,397	Victoria, B.C., 1908	" 63 "	116.0	24.6	14.0	305	166	Victoria, B.C.	Esquimalt & Nanaimo Ry., Victoria, B.C.
Pukwana	112,145	Kingston, Ont., 1903	" 13 "	54.3	8.9	3.9	14	9	Toronto	J. D McMurrich, Toronto, Ont.
Tseekwa	126,208	Vancouver, B.C., 1908	" 2 "	27.5	8.2	4.3	8	5	Vancouver, B.C.	K. Walkem, Vancouver, B.C.
Usher	114,053	Glasgow, Scotland, 1901	" 310 "	340.0	46.5	25.7	3594	2350	Yarmouth, N.S.	Usher Steamship Co., Ltd., Chegoggin, N.S.
Wampanoag	125,997	....	" 13 "	57.3	12.0	8.4	38	22	Quebec, Que	J. Doran, Levis, Que.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING AUG., 1908.

Name.	No.	Where and When Built.	Rig	Length	B'dth.	Depth	Gross Tons	Reg. tons.	Port of Registry.	Owners
C. D. Pickels	126,011	Bridgetown, N.S., 1908	Schr.	172.0	33.4	12.5	......	400	Annap. Royal, N.S	F. W. Pickels, M.O., Annapolis Royal, N.S.
Elia	126,251	....	"	32.3	10.8	5.0	......	11	Chatham, N.B.	P. Richard, Escuminac, N.B.
Frankie King	126,062	Miminigash, P.E.I., 1908	"	54.4	14.0	5.6	......	27	Charlottet'n P.E.I.	P. Kennedy, M.O., Palmer Road, P.E.I.
Hattie Maud	122,430	Tancook, N.S., 1908	"	44.7	12.4	5.4	......	16	Halifax, N.S	J. J. Berrigan, Canso, N.S.
Inga	126,110	La Have, N.S. 1908	"	100.2	27.0	10.3	......	161	Lunenburg, N.S.	J. N. Rafuse, M.O., La Have, N.S.
J. I. L. No. 1	126,178	Ladner, B.C., 1908	Barge	59.7	20.0	4.7	......	48	N. Westminster, BC	Jervis Inlet Lumber Co., Ltd., Ladner, B.C.
King Josiah	125,965	Port Greville, N.B., 1908	Schr.	98.1	28.7	8.9	......	147	Parrsboro, N.S.	J. & N. Solely, Lower Economy, N.S.
Le Voilier	126,156	St. J. des Chaillons, Q., 1908	Sloop	97.2	22.5	7.4	......	94	Montreal	F. Lalibert, St. Jean des Chaillons, Que.
The Main	126,052	Welland, Ont., 1908	Dred.	100.0	36.0	7.4	......	348	Owen Sound, Ont.	Owen Sound Dredge and Construction Co., Ltd., Owen Sound, Ont.
Marion C.	126,184	Shelburne, N.S., 1908	Sloop	31.0	11.3	6.3	......	11	Shelburne, N.S.	W. J. Crowe, Sand Point, N.S.
Mathalia	126,183	Clark's Harbor, N.S., 1900.	"	31.0	11.6	6.4	......	11	"	W. Watts & E. Holmes, Sand Point, N.S
Plum	116,688	Richibucto, N.B., 1903	Schr.	36.0	11.0	5.0	......	11	Richibucto, N.S.	G. H. Long, Richibucto, N.S.
Prince Willie	126,159	Sorel, Que., 1908	Dred.	11.6	35.3	7.1	......	258	Montreal	J. W. Poupore Co., Ltd., Montreal.
Sault au Mouton	126,157	Les Escoumains, Q., 1907	Schr.	102.5	26.7	6.3	......	71	"	J. A. N. Mercier, Sault au Mouton, Que.
Rosie G.	111,799	Little Lorraine, N.S., 1908	"	38.7	12.4	6.2	......	16	P.Hawkesbury, N.S	J. Gallant, Little Lorraine, N.S.
Three Swallows	126,022	Glace Bay, N.S., 1897	"	30.2	12.0	5.0	......	7	Sydney, N.S.	B. Gracie, Little Bras d'Or, N.S.
Uncas	122,429	Sambro, N.S., 1908	"	35.2	11.4	5.0	......	11	Halifax, N.S.	A. W. Nickerson, Sambro, N.S.
Venturer	92,315	Brooklyn, N.S., 1886	"	115.0	29.4	9.3	......	257	Liverpool, N.S.	D. A. McDonald, Halifax, N.S.
White Cap	126,252	Point Sapin, N.B., 1908	"	34.4	10.0	5.0	......	11	Chatham, N.B.	N. Mazerolle, Point Sapin, N.B.
Willena Gert'de.	125,967	Parrsboro, N.S., 1908	"	132.1	32.4	11.2	......	271	Parrsboro, N.S.	H. E. Mosher, M.O., Parrsboro, N.S.

TURNBUCKLES



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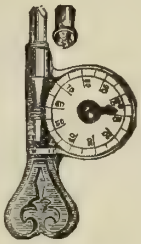

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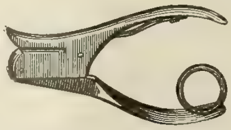

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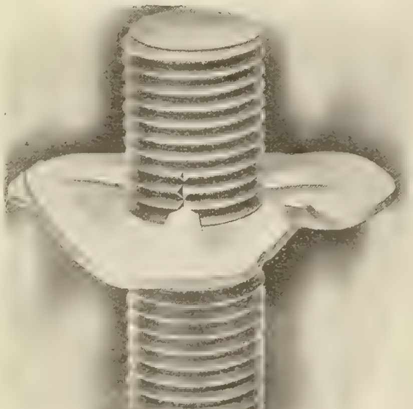

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A New United States Canal.

The Association of Commerce of Chicago, Ill., has under discussion a proposal for the construction of a canal from that city to Toledo, Ohio. The construction of such a canal would, it is claimed, reduce the distance between Chicago and Buffalo, N.Y., by about 500 miles, as compared with the present route via Lakes Michigan, Huron and Erie, with the connecting water between the last two lakes. The matter is in the hands of E. S. Conway, as chairman of the Association's Deep Waterways Commission. This commission has already taken up and is directing an agitation for the construction of a deep waterway from Chicago to the Gulf of Mexico, by means of the enlargement of existing river and lake waterways, and the construction of connecting links. In a letter recently written to the Mayor of Toledo, Mr. Conway says that as soon as the Great Lakes to the Gulf waterway is well in hand the energies of the Association will be devoted to the promotion of the Chicago-Toledo direct waterway. The canal, as proposed, would be 244 miles long, and have a depth of 20 ft. It would start from below South Chicago, cut across Michigan, and strike Lake Erie about the entrance of the Maumee River, 10 miles from Toledo. From this point traffic could be diverted up the river to the great elevators at or above Toledo, or a straightaway run for Buffalo and Lake Ontario would be open.

◆

Lake Grain Shipments 1905-1907.

The following comparative statement, prepared by F. E. Gibbs, Grain Inspector, Fort William, Ont., shows the total shipments of grain in bushels from Fort William and Port Arthur of the crops of 1905, 1906, and 1907, from Sept. 1 of each year to Aug. 31 of the following year:

	1905 bush.	1906 bush.	1907 bush.
Wheat...	55,509,720.50	54,849,649.40	47,521,490.50
Oats.....	5,721,815.30	12,744,736.02	11,096,405.24
Barley...	959,546.42	1,839,177.42	1,971,938.41
Flax.....	456,928.16	753,307.26	1,514,644.40
Rye......	....	9,010.00	3,036.00
Totals.	62,648,010.38	70,195,880.10	62,107,514.55

The figures given, include rail as well as vessel shipments.

White Star Line ss. Laurentic.

The s.s. Laurentic, the first of the two vessels with which the White Star Line purposes inaugurating its Canadian service, was launched at Belfast, Ireland, Sept. 9. When it was decided last year to build an additional two vessels for the Canadian trade, the intention was that they were to be run under the management of the Dominion Line, another of the constituent companies of the International Mercantile Marine Co., but it was later arranged for the White Star Line to manage them as the White Star-Dominion Service, and the names selected for the vessels, viz., Alberta and Albany, were changed to Laurentic and Megantic.

Particular interest will be attached to this vessel on account of the adoption of a combination of reciprocating engines with a low pressure turbine, the Laurentic being the first passenger steamer designed with such arrangement. It has been generally assumed that the adoption of this system is an indication of an intention with regard to the machinery of other steamers in contemplation. The arrangement of machinery constitutes the vessel a triple-screw steamer, each of the wing propellers being driven by four-crank, triple-balanced engines, and the central propeller by a turbine. The object is to retain the advantages of the highly perfected balanced reciprocating engines and at the same time get the benefit of the further expansion of steam in a low pressure turbine. From an engineer's point of view, this is a combination of well-established practice and experience with the latest theory, and it may prove to be one of the soundest commercial developments of the present time—at any rate, the arrangement seems to be conceived on safe lines, and to have every prospect of success. The reciprocating engines will use steam of 215 lbs. pressure per sq. in. After the steam has done its work in these engines the exhaust steam from the four low pressure cylinders will pass into the turbine, in which it will be expanded down to 2 lbs. absolute pressure before exhausting into the condensers. It will thus be seen that the steam will be utilized to the utmost extent by means of this combination. The necessity for an astern turbine, which is essential in steamers fitted with turbines only, is avoided, as in this vessel, both for going astern and manœuvring in and out of port, the reciprocating engines will be more than sufficient, as they will develop over three-fourths of the total combined horse-power.

The Laurentic will be the largest vessel in the Canadian trade, her dimensions being: Length, 565 ft.; breadth, 67.4 ft.; and tonnage, 14,500 gross. There will be accommodation for 235 first-class, 430 second-class, and 1,000 third-class passengers, in addition to a large cargo capacity. She is being constructed throughout on the most approved principles, nothing that long experience and practical knowledge can suggest being wanting to make her as perfect as possible in all particulars, and has been designed with cellular double-bottom extending the whole length, and is especially strengthened under the engines to give greater rigidity in the vicinity of the machinery. The vessel has 9 watertight bulkheads, dividing her into 10 watertight compartments. The double-bottom, in addition to being an element of strength and security, provides space for water ballast, which is also carried in the fore and after peaks.

The passenger accommodation has been carefully arranged, a feature of the entrances and public rooms being their height and general roominess, the staterooms having the same characteristics. The decorations throughout will be of a most attractive nature. The staterooms will be situated on the lower promenade deck, and on the shelter deck, and will include a number of cabins en suite, with private lavatories and bathrooms adjoining. An electric passenger elevator, serving four decks, will also be installed.

The second-class passenger accommodation consists of dining saloon, on the middle deck, extending the full width of the ship, seating 262 passengers; the library, on the lower promenade deck, and smoke-room on the upper promenade deck; also beautiful apartments, tastefully decorated in polished hardwood, and spacious staterooms.

The third-class quarters will compare favorably with similar accommodation on the steamer. The dining-room, situated aft on the upper deck, is exceptionally fine, extending the whole width of the ship.

There are six cargo holds and the derricks and other appliances for working the ship and cargo are of the latest pattern, special attention being paid in the design to the requirements of shippers in the Canadian trade. There will also be large refrigerator chambers for provisions and cargo. The Marconi system of wireless telegraphy will be installed and also a submarine signalling apparatus, the value of each being universally recognized.

It is hoped to have the Laurentic completed by the end of the year, when she will be placed on the Liverpool-New York route, and transferred to the Canadian service as soon as the St. Lawrence opens for navigation in 1909, sailing in conjunction with the Dominion Line steamships Canada and Dominion.

The Megantic will shortly be launched, also, at Belfast, but will be propelled by reciprocating engines alone.

Lake Grain Shipments, 1907 Crop.

The following Statement, prepared by F. E. Gibbs, Grain Inspector, Fort William, Ont., shows the shipments of grain by vessels from the different elevators at Fort William and Port Arthur, of the crop of 1907, from Sept. 1, 1907, to Aug. 31, 1908, inclusive, with ports of destination.

	Wheat		Oats		Barley		Flax	
	Canadian Vessels	Foreign Vessels	Canadian Vessels	Foreign Vessels	Canadian Vessels	Foreign Vessels	Canadian Vessels	For gn Vess'ls
Canadian Ports								
Owen Sound...	1,661,159.10	....	2,268,628.16	....	233,542.36	....	....	.....
Midland.......	3,386,382.30	....	34,493.24	....	24,139.02	....	....	.....
Tiffin.........	1,357,126.10	....	424,520.08	....	77,240.22	....	....	.....
Collingwood....	423,878.30	....	40,415.20	....	....	....	....	.....
Pt. Edward....	1,866,762.50	....	292,059.02	....	47,867.04	....	23,079.05	.....
Depot Harbor .	3,657,130.50	....	272,962.22	....	44,701.40	....	....	.....
Meaford.......	783,982.40	....	232,884.30	....	41,637.28	....	....	.....
Goderich......	3,597,301.10	....	1,337,909.16	....	41,830.26	....	301,072.54	.....
Pt. Colborne...	291,063.00	....	....	....	....	....	31,701.44	.....
Thorold.......	468,391.20	....	....	....	....	....	....	.....
Kingston......	6,307,026.40	....	548,213.26	....	352,747.38	....	171,574.05	.....
Prescott.......	576,964.40	....	....	....	17,921.32	....	....	.....
Montreal......	5,865,056.00	....	824,155.12	....	311,988.17	....	560,496.01	.....
Totals.......	30,242,225.30		6,276,243.06		1,193,617.45		1,087,923.53	
Foreign Ports...								
Port Huron.....	106,093.50	194,603.10	....	6,334.02	....	....	....	.....
Erie...........	300,181.00	519,144.10	....	....	....	....	....	.....
Chicago........	....	183,383.00	....	....	....	....	....	.....
Ogdensburg....	63,042.50	....	....	....	....	....	....	.....
Buffalo........	1,723,805.10	4,593,517.40	746,153.20	269,079.06	51,471.20	40,273.44	104,242.01	42,000
Totals.......	32,435,348.20	5,490,648.00	7,022,396.26	275,413.08	1,245,089.17	40,273.44	1,192,165.54	42,000

◆

P. C. Robinson, Port Stanley, Ont., has been appointed a fishery officer in the Fisheries Protection Service of Canada, with the rank of Master Mariner.

The Department of Railways and Canals received tenders Sept. 28 for closing the gap in the Carillon Canal dam, and for trimming slopes on the Cornwall Canal.

An order-in-council of Sept. 9 prohibits the use or operation of vessels known as steam trawlers using beam, otter or other trawls for the purpose of catching fish within the 3-mile limit, and in the bays and harbors of Canada.

The Canada Gazette, Sept. 26, announces that the name of the steamer Marion has been changed to Owen. There are three steamers named Marion on the Canadian register, at Halifax, N.S.; Toronto and Kenora, Ont., respectively, but no indication is given as to which one the change of name applies.

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The Quebec-Imperial Collision.

Commander Spain, Dominion Wreck Commissioner, has given the following judgment in the case of the collision between the Richelieu and Ontario Navigation Co.'s steamboat Quebec and the Canadian St. Lawrence Navigation Co.'s steamboat Imperial on the St. Lawrence River, near Varennes, Que., on July 5, at about 5.55 a.m. The judgment is concurred in by Capt. Arch. Reid, Port Warden of Montreal, and Capt. Francis Nash, who acted as assessors.

"The steamboats Quebec and Imperial are engaged in the same trade, more or less in competition, that is, carrying passengers and cargo from Montreal to Quebec, and vice versa, calling at various intermediate ports. On the morning of July 5, both vessels were bound from Quebec to Montreal in close proximity, the Imperial somewhat ahead of the Quebec, proceeding at a speed of about 13 miles an hour, whereas the speed of the Quebec was 16 or 17 miles, the Quebec therefore overhauling the Imperial. The C.P.R. steamship Montrose was met proceeding down the river, and in order to clear this vessel, the helm of the Imperial was ported, and after the Montrose had passed, starboarded, to bring her back again into the channel, but before the starboard helm had taken effect, the collision between the two ships had occurred, the Imperial striking the Quebec on the forepart of the paddle-wheel box with the bluff of her starboard bow, sustaining slight damage herself, and injuring the Quebec's paddle-wheel considerably, so that this vessel had to anchor, and apply for tugs to take her to her destination. The Court considers that an unnecessary amount of port helm was given to the Imperial when she ported to clear the Montrose. It is a well-known fact that if an overtaken ship is compelled to alter her course in order to avoid another ship, she must not alter more than is necessary, otherwise she will fail to justify her alteration under article 27.

"From all the evidence adduced it appears from the time the Imperial left Sorel up to and at the time of the collision, the navigation of the vessel, and the charge of the deck, was left entirely in control of Jos. Myrand, apprentice pilot, who was actually a wheelsman, and was not a proper member of the crew, as he had not signed the ship's articles, and was simply taking the place of Oscar Charpentier, who signed the report of the casualty which was produced in court, but was not present at the time of the accident. There was no lookout man, and the master and mate, who both hold the necessary certificates, were in their cabins, no properly certificated officer of any kind or description was on deck, and the ship, although carrying a number of passengers, was navigated in a most haphazard manner. Myrand, after porting the Imperial's helm to clear the Montrose, no doubt suddenly realized the close proximity of the Quebec, for he immediately put the helm hard to starboard, calling to his assistance a passenger named L. Plante, who happened to be in the wheelhouse at the time, but the alteration of the helm took place too late, and the collision occurred with the resultant damage. The court is of the opinion that if a competent officer had been in charge of the Imperial's deck, and had he properly looked after the safe navigation of the vessel, it is probable the collision would have been averted. The court therefore considers that in great measure the casualty was caused by the contributive negligence of those in charge of the Imperial.

"As far as the Quebec is concerned, it is proved by the evidence that this vessel was well officered and well manned; the captain and first mate both hold master's certificates of competency; the first mate was in charge of the deck, the second pilot and wheelsman were in the wheelhouse, and a man was on the lookout at the time of the collision. She was, as before stated, proceeding up the river on a parallel course, following and overhauling the Imperial, evidently intending to pass that vessel, but gave no intimation to the ship ahead of her that she meant to carry out this manœuvre, by giving "one prolonged blast on the steam whistle," in accordance with by-law 80 of the Harbor Commissioners of Montreal, and she also contravened article 24 of the International Rules of the Road. The court is therefore of the opinion that both vessels are responsible for the collision, the Imperial for improper and neglectful navigation, and the Quebec for contravention of the Rules of the Road and the Harbor Commissioners' By-Laws.

"It was established during the investigation that rule 80 of the Harbor Commissioners' By-Laws is seldom or never carried out, except by ocean steamships; this, however, in the opinion of the court does not exonerate the Quebec's officers, and first mate Lafrance, who was in charge of the deck of this vessel at the time of the casualty, is severely reprimanded for not attending to the well-known rules of the road. The court wishes it to be emphatically understood that for the future more severe measures than this will be taken in regard to officers who have been proven to be careless in carrying out the rules for safe navigation.

"The court considers that Capt. Jean of the Imperial was guilty of gross neglect in allowing his ship, with a number of passengers on board, to be in charge of a young apprentice pilot. Not only was his vessel a menace to navigation by not having any certificated officer on deck, but also the lives of passengers were endangered, and therefore suspends the certificate of a master in the minor inland waters held by this officer for twelve months from July 5, the date of the accident."

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie canals in August:

Articles.			Canadian Canal	U.S. Canal	Total
Copper	Eastbound	Net tons	1,548	14,331	15,879
Grain	"	Bushels	877,361	799,356	1,676,717
Building stone	"	Net tons	....	442	442
Flour	"	Barrels	159,811	290,310	450,121
Iron ore	"	Net tons	1,282,803	3,378,749	4,661,552
Pig iron	"	"	....	5,080	5,080
Lumber	"	M. ft. B.M.	4,869	74,178	79,047
Wheat	"	Bushels	2,480,423	1,038,620	3,519,043
General merchandise	"	Net tons	5,668	8,499	14,167
Passengers	"	Number	4,655	3,471	8,126
Coal, hard	Westbound	Net tons	29,015	228,687	257,702
Coal, soft	"	"	427,973	1,341,750	1,769,723
Flour	"	Barrels	400	20	420
Grain	"	Bushels	....	....	....
Manufactured iron	"	Net tons	19,972	10,168	30,140
Iron ore	"	"	....	....	....
Salt	"	Barrels	8,181	68,897	77,078
General merchandise	"	Net tons	38,251	55,348	93,599
Passengers	"	Number	4,472	4,282	8,754
Vessel passages		Number	808	1,684	2,492
Registered tonnage		Net	1,467,340	3,818,729	5,286,069
Freight—Eastbound		Net tons	1,407,967	3,610,752	5,018,719
" Westbound		"	516,421	1,646,290	2,162,711
Total freight		"	1,924,388	5,257,042	7,181,430

Lake Grain Rates to Montreal.

A Montreal daily paper recently charged the Dominion Marine Association with being a trust, and with acting in restraint of trade. It said: "If during the navigation season of 1900 grain could be carried from Port Arthur to Montreal at 3½c. a bushel at a profit, why should it have cost 7c in preceding years? The answer to this important question may tend to explain why this is the first year during which the St. Lawrence route has received a fair share of the grain business originating at upper lake ports. A revelation has been made of the existence of a Canadian organization which, so far as the grain trade is concerned, appears to operate as surely and emphatically to the disadvantage of Montreal as if it were specially created for that purpose. The existence of this organization has been well known but its methods and their results have only come to light as the fruit of a patient and prolonged investigation by a high authority here, who, in order to ascertain the truth, made a special trip to the west and put himself directly in touch with those familiar with the conditions. The documentary evidence concerning this association is of a startling character. Its primary function, apparently, is to manipulate the rates for the transportation of grain in the Great Lakes, and this it has succeeded in doing in such a manner that out of 47,000,000 bush. last year no less than 16,000,000 went to U.S. ports instead of coming by the Canadian route to be sent to Great Britain through the Canadian ports. Not all of this 16,000,000 bush. were sent via Buffalo owing to the operations of the organization in question, but when it is learned that the organization charged a 7c. rate to Montreal when this year but 3½c. is charged, it is fair to debit it with much of the result. The organization is quiescent this year, for the reason that there has been very little grain to ship. The consequence of this quiescence is that although this is the leanest year of a decade, more grain has come to Montreal than any of the fat years that have gone before. The reason is simple and easy to understand. The organization in other years had fixed the rate for transportation of wheat to Montreal at 7c. a bushel. This year, through its practically enforced inactivity, the rate has found its level at 3½c. a bushel, and so the grain comes here because this is the most economic route. Now, the trouble is that this association, although quiescent now, is not dead, and there is much ground to fear that as soon as the products of what we all believe will prove a most bountiful harvest begin to find their way eastward, its operations will be renewed to the detriment of Montreal and other Canadian ports."

The Montreal Witness in referring to the same matter said:

"Grain merchants are of the opinion that the time has come when an investigation into the alleged combine of certain shipping interests, which is said to exist on the Great Lakes, should be made. It is notorious, they assert, that since the opening of navigation rates have advanced from 3½c. to 7c. a bushel on grain from lake ports to Montreal, and this, they claim, is detrimental to the development of the St. Lawrence route as a grain shipping centre, as it goes far to nullify the splendid work which has been accomplished during recent years by the Government in developing the national waterway. Last fall, when business was brisk on the lakes, the navigation companies charged 7c. a bushel on grain from the lake ports to the seaboard, but early this season, owing to a scarcity of cargo, prices were considerably lower, until at one period 3¼c. was accepted. This, however, did not last long, for with the increase of traffic the rates were gradually increased until they have reached the unwarranted figure of 7c. a bushel, and indeed it is claimed that as high as 7½c. has been asked. This, grain exporters state, is going too far, and nothing short of a Government investigation will satisfy the trade."

The Dominion Minister of Marine in an interview on the subject is reported to have said: "The St. Lawrence route now appears to be suffering under a certain disadvantage, and although I have had no official report to that effect, I understand there is a combination of both Canadian and U.S. shipping interests which have fixed excessive prices for carrying grain from the lakes to Atlantic ports. If that is true, then I can only say that it is a matter which ought to have the strictest investigation, for it is palpably unjust to Canada that our superior natural advantages should be placed under such artificial disability. Public opinion ought to be awakened on this point, and I repeat that the strictest investigation ought to be made into the operations of this alleged combine."

A DENIAL OF THE CHARGES.

A. A. Wright, President Dominion Marine Association, has written the Toronto Globe in reference to the foregoing as follows: "I do not propose to carry on any newspaper controversy with people who are not manly enough to ask openly for the investigation which they write so much about, and which I have repeatedly stated would be welcomed by the lake vessel owners, as we would very soon show where the discrimination comes in. For the information of the public I would again state:

"That the statement that there is any organization on the great lakes for controlling freight rates on grain in the U.S. and Canada is absolutely false, and this is well known to all grain shippers.

"The present rates on grain from Fort William and Duluth to Montreal vary from 4½c. to 6c. per bushel.

"I am informed by exporters that it costs 6.40c. per bushel to take grain from Buffalo and put on board an ocean steamer in New York. The rate from Duluth to Buffalo at present varies from 1¼c. to 1½c. per bushel, according to the size of the cargo, making a total, even taking the lowest possible rate from Duluth to Buffalo of 7.65c. per bushel, Duluth to f.o.b. New York, as against the highest present rate from

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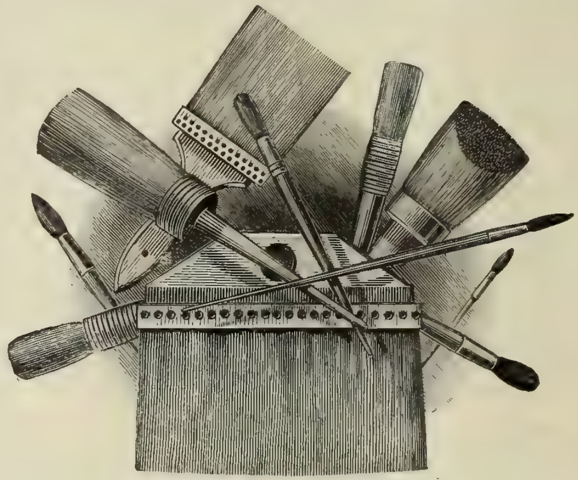

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Duluth or Fort William of 6c. per bushel f.o.b. Montreal, or a difference which the lake vessel men are giving in favor of Montreal of 2.65c. per bushel, taking the highest present Canadian rate, or 4.15c. per bushel, taking the lowest present rate, and yet I am informed by exporters that it is possible to ship from Fort William via Buffalo and New York to Liverpool at the present time as cheap or cheaper than via Montreal, as the ocean rates out of Montreal are double the rates out of New York, and the history of this grain shipping business has been that whatever reduction is made on the lake end of the route is immediately added to the ocean rate out of Montreal, to keep the cost of shipping from Duluth or Fort William to Liverpool almost as high by Montreal as by New York.

"When Mr. Brodeur holds the investigation, of which we hear so much, lake vessel men will show where combines exist, if any do exist."

Among the Express Companies.

The Canadian Northern Ex. Co. has closed its office at Foote's Bay, Ont.

The Canadian Ex. Co. has opened offices at Burnt River, Ont., and Memramcook, N.B.

The Canadian Northern Ex. Co. has opened offices at La Vallee, Ont., and Ruddell, Sask.

E. Rendell, Dominion Ex. Co.'s agent at Strathcona, Alta., who recently absconded with some express orders and cash, has been sentenced to six months' imprisonment.

E. Allen, heretofore Assistant Superintendent western, northern and southern divisions, Canadian Ex. Co., has been appointed Superintendent same divisions, with headquarters at Toronto.

The Canadian Northern Ex. Co. announces the closing of its offices at Sparrow Lake and Royal Muskoka, Ont., and the opening of offices at Mattawin, Ont.; Myrtle and Vassar, Man., and Borden, Sask.

The Canadian Ex. Co.'s lease of its present offices on South James St., Hamilton, expiring in Nov., it is reported to have secured the premises at one time occupied by the Landed Banking Co. on the same street.

The Canadian Ex. Co., which has hitherto operated in conjunction with the Canadian Northern Ex. Co. over the Quebec and Lake St. John Ry., has retired therefrom, the Canadian Northern Ex. Co. being now exclusive on that line.

The Canadian Ex. Co. announces the recent appointment to its European offices as follows: F. C. Salter, European Traffic Manager, W. Cuthbertson, General Agent, with offices at Liverpool, Eng.; T. S. Jones, Agent, London, Eng.; and J. M. Walker, Agent, Glasgow, Scotland.

Telegraph and Cable Matters.

The Marconi Wireless Telegraph Co. has opened a public telegraph station at Liverpool, Eng.

The G.T. Pacific Ry. telegraph line was completed as far as Saskatoon, Sask., Sept. 15, and a commercial business will be done as soon as all the arrangements are completed.

S. Edwards, formerly Superintendent C.P.R. Telegraphs at Calgary, Alta., and since Mar., 1907, Superintendent Alberta Government Telephone system, has resigned on account of ill-health.

The installation of the wireless telegraph station at the Driard Hotel, Victoria, B.C. was expected to have been completed at the end of Sept. The work is being done by the United Wireless Telegraph Co.

Owing to the promotion of a colored operator, who has been in the employ of the C.P.R. Telegraph Department for 20 years, four other operators at Montreal declined to continue work, and were subsequently dismissed.

The receipts of the Pacific Cable Board for the year recently concluded were £109,637, a decrease of £2,852 from the previous year. The deficiency on the year's working is payable by the countries interested, as follows: Great Britain, £17,322; Canada, £17,322; Australia, £20,787; New Zealand, £6,929.

G. Marconi arrived in Canada early in Sept., in company with one of the directors of the Marconi Wireless Telegraph Co. of Canada, and it is understood that several changes in the local management of the company will be made during their visit. As announced in our Aug. issue, J. D. Oppe, Manager of the company at Montreal, has resigned.

E. J. Haughton, formerly employed in the C.P.R. Telegraph Department, and latterly in charge of the Dominion Government's wireless telegraph station at Gonzales Hill, B.C., has been appointed superintendent of all the Dominion Government's wireless telegraph stations on Vancouver Island. At present there are five stations, situated at Gonzales Hill, Point Grey, Cape Lazo, Estevan and Pachena.

The annual joint reunion of the Old Time Telegraphers' and Historical Association, and the Society of the U.S. Military Telegraph Corps, which was omitted last year on account of the general unrest among telegraphers, was held at Niagara Falls, N.Y., Sept. 16,

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NOTICE TO SHAREHOLDERS.

THE Twenty-seventh Annual General Meeting of the Shareholders of this company, for the election of Directors to take the places of the retiring Directors, and the transaction of business generally, will be held on Wednesday, the 7th day of October next, at the principal office of the Company, at Montreal, at Twelve o'clock noon.

SPECIAL MEETING.

The meeting will be made special for the purpose of considering and, if approved, of authorizing an increase of the present Ordinary Capital Stock of the Company by an amount not exceeding $50,000,000, for the purposes of the Company, such increase of stock to be issued from time to time according to the requirements of the Company, and as may be determined by the Directors, and of adopting such resolution or By-law as may be deemed necessary in connection therewith in order to enable the Directors to give effect thereto.

The Common Stock Transfer Books will close in Montreal, New York and London, at 3.00 p.m. on Tuesday, the first day of September; the Preference Stock Books will be closed in London at the same time.

All books will be re-opened on Thursday, the eighth day of October.

By Order of the Board,
WALTER R. BAKER,
Secretary.

Montreal, August 31st, 1908.

GRAND TRUNK RY. COMPANY OF CANADA.

NOTICE is hereby given that the Ordinary General Half-Yearly Meeting of the Grand Trunk Railway Company of Canada will be held at the City Terminus Hotel, Cannon Street, London, E.C., on Thursday, the 8th day of October, 1908, at 12 o'clock noon, precisely, for the purpose of receiving a Report from the Directors and for the transaction of other business of the Company.

Notice is also given that the Transfer Books of the Company will be closed from Monday, the 7th day of September, to the day of Meeting, both days inclusive.

By Order,
C. RIVERS WILSON, President.
H. H. NORMAN, Secretary.

Dashwood House, 9 New Broad Street,
London, E.C., 28th August, 1908.

JAMES PLAYFAIR, Pres. & Gen'l Mgr. D. L. WHITE, Vice-President. J. W. BENSON, Sec'y-Treas.
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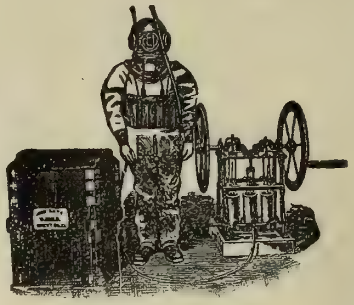

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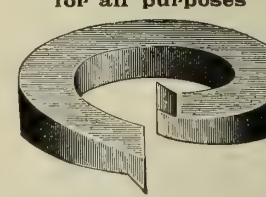

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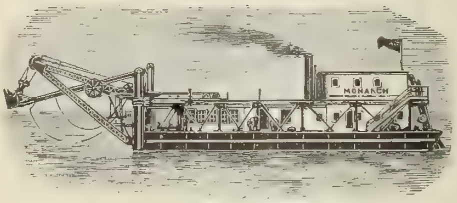

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17 and 18. I. McMichael, Vice-President and General Manager G.N.W. Telegraph Co., Toronto, and G. F. Macdonald, Ottawa, were re-elected Vice-Presidents of the Old Time Telegraphers' and Historical Association for the current year.

A Canadian Associated Press despatch from London, Eng., Aug. 24, said: "V. Poulsens has started new and interesting experiments with his wireless system in connection with the forthcoming opening of the service between the west of Ireland and Canada. Poulsens thinks he can easily send 150 words a minute by his new apparatus." It is not quite clear what is meant by "the forthcoming opening of the service between the west of Ireland and Canada," as such a service has been in constant use for several months. The speed indicated may also be taken with a grain of salt.

The appeal of the Reid Newfoundland Co. against the judgment of the Newfoundland Supreme Court, delivered in July, 1907, when it was ordered, at the instance of the Anglo-American Telegraph Co., Ltd., that an account be taken of the messages transmitted over a special wire by the Reid Newfoundland Co., other than messages connected with, or for purposes incidental to, the management, operation and control of the line of railway between St. John's and Harbor Grace, via Whitbourne, and between Harbor Grace and Carbonear, was recently dismissed, with costs, by the Judicial Committee of the Privy Council, in London, Eng.

The Northern Commercial Telegraph Co., which has opened an office on St. Francois Xavier St., Montreal, is reported to have recently purchased all the Canadian rights of the Dominion De Forest Wireless Telegraph Co.,paying for same with 200,000 fully paid-up shares, and to have also made an offer to the shareholders of that company, which is being wound up, to exchange their shares for shares of equal face value in the new company. The N.C.T. Co. was incorporated in 1906, with a capital of £750,000 and office in Montreal, to take over the original charter and property of the Northern Commercial Co., which was incorporated in 1898, with a capital of £100,000 and office in London, Eng. The objects of the original charter were to construct and operate telegraph and telephone lines by means of cables through the waters on the west coast of British Columbia, with the necessary land connections at each end, from Vancouver to Dawson, Yukon, and to connect with the lines of any company in Canada, or in the U.S., near the boundary between B.C., or the Yukon Territory, and the U.S. In 1899 the capital stock of the company was authorized to be increased to £300,000, and in 1900 it was further increased to £500,000, and the clause in the original charter providing that the powers granted be void if the construction of one of the lines authorized be not commenced, and 15% of the amount of the capital stock be not spent on it within two years from the passing of the act, was repealed. A short stretch of line was subsequently erected in the Yukon Territory, and further short lines in Northern Ontario, and these, together with the property of the Dominion De Forest Wireless Telegraph Co., have been taken over by the present company. It is claimed that the stock has been underwritten, and that the construction of telegraph lines in Quebec and Ontario will be undertaken shortly. The officers and directors of the company are: President, E. W. Humphrey, Montreal; Vice-President, W. C. Sherwood, New York; E. K. Stallo, A. Macdonald, C. W. MacKay, G. H. Watson, of the United States; J. A. Ouimet and T. Berthiaume, of Montreal. E. W. Humphrey was the promoter of the Dominion De Forest Wireless Telegraph Co.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Aerated Waters
E. L. Drewry..........................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co...................Toronto.
Canadian Westinghouse Co......Hamilton, Ont.

Ales
E. L. Drewry..........................Winnipeg.

Alloys
Goldschmidt Thermit Co...............Toronto.

Angle Bars
Hamilton Steel & Iron Co.......Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co.......Racine, Wis.

Automobiles
Polson Iron Works, Ltd...............Toronto.

Axes
James Smart Mfg. Co...........Brockville, Ont.

Axe Steel
Montreal Steel Works.................Montreal.

Axles
James Hutton & Co...................Montreal.
Jas. W. Pyke & Co....................Montreal.
Rhodes, Curry & Co..............Amherst, N.S.

Badges
R. Woodman Mfg. & Supply Co...Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co...Boston, Mass.

Beacons
International Marine Signal Co........Ottawa.

Bearings, Side
Chicago Railway Equipment Co......Chicago, Ill.

Blankets and Bedding
The Hudson's Bay Co...........................

Blasting Powder
Standard Explosives Limited..........Montreal.

Boilers
Babcock & Wilcox (Ltd.)..............Montreal.
Canada Foundry Co...................Toronto.
Jno.McDougall,Caledonian IronWorks Co.Montreal
Polson Iron Works....................Toronto.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Portable
Canada Foundry Co...................Toronto.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co., Ltd........Amherst, N.S.

Boiler, Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Water Tube
Babcock & Wilcox (Ltd.)..............Montreal.
Jno.McDougall,Caledonian IronWorks Co.Montreal
Robb Engineering Co., Ltd........Amherst, N.S.

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Jas. W. Pyke & Co....................Montreal.

Bolsters
Dominion Car and Foundry Co.........Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited......................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co.........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.........Montreal.
N. J. Holden Co., Ltd..................Montreal.
Railway Materials Co..........New York City.

Brass and Copper Cloth
The B. Greening Co.............Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited...............Toronto.

Bridges
Canada Foundry Co...................Toronto.
Canadian Bridge Co..........Walkerville, Ont.
Dominion Bridge Co....................Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd..........Montreal.

Bumping Posts
McCord & Co......................Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co. .New York.

Buoys
International Marine Signal Co........Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co.................Montreal.

Car Castings
American Brake Shoe & F'dry Co. .Mahwah, N.J
Canadian Iron and Foundry Co........Montreal.

Car Cleaner
Modoc Soap Co...................Philadelphia, Pa.

Car Closets
Duner Co.........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd..................Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co. .New York.
Canadian Gold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Jacks
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co...................Montreal.
Mussens Limited......................Montreal.

Car Lighting
Bliss Electric Car Lighting Co...Milwaukee, Wis.
Canadian Cold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co...................Montreal.
Mussens Limited......................Montreal.
R. Woodman Mfg. & Supply Co....Boston, Mass.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd..................Montreal.
F. H. Hopkins & Co...................Montreal.

Car Seals
R. Woodman Mfg. & Supply Co....Boston, Mass.

Car Wash Brushes
Wolfe Brush Co....................Pittsburg, Pa.

Cars
American Car and Equipment Co....Chicago, Ill.
Canada Car Co. (Ltd.).................Montreal.
Crossen Car Mfg. Co..............Cobourg, Ont.
Dominion Car and Foundry Co........Montreal.
J. T. Gardner.......................Chicago, Ill.
Hart-Otis Car Co. (Ltd.)..............Montreal.
Hotchkiss, Blue & Co..............Chicago, Ill.
Preston Car and Coach Co., Ltd...Preston, Ont.
Rhodes, Curry & Co..............Amherst, N.S.

Cars, Mine
Canadian Fairbanks Co. Ltd..........Montreal.

Car Windows
O. M. Edwards..................Syracuse, N.Y.

Castings
Crossen Car Mfg. Co..............Cobourg, Ont.
Standard Steel Works Co......Philadelphia, Pa.

Castings, Brass
Canadian Bronze Co...................Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co..............Walkerville, Ont.

Castings, Iron
Canada Car Co., Ltd...................Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co..............Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co—Mahwah, N.J.

Castings, Malleable
Taylor & Arnold......................Montreal.

Castings, Steel
Canadian Iron and Foundry Co........Montreal.
Montreal Steel Works..................Montreal.
Rhodes, Curry & Co..............Amherst N.S.

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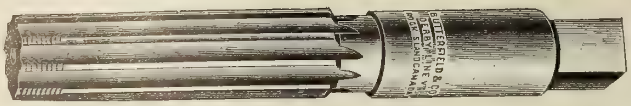

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Toronto Pressed Steel Co. . . . . Toronto.

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Babcock & Wilco (Ltd.). . . . . Montreal.

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Toronto Bolt and Forging Co. . . . . Toronto.

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The Hudson's Bay Co. . . . .

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Canadian Fairbanks Co., Ltd. . . . . Montreal.
F. H. Hopkins & Co. . . . . Montreal.
Toronto Pressed Steel Co. . . . . Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co. . Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.). . . . . Montreal.

Electric Car Route Signs
Acton Burrows Limited. . . . . Toronto.

Electric Cranes
Babcock & Wilcox. . . . . Montreal.
Canada Foundry Co. . . . . Toronto.
Canadian Fairbanks Co., Ltd. . . . . Montreal.
Dominion Bridge Co. . . . . Montreal.
Mussens Limited. . . . . Montreal.

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Electrical Fuses
Standard Explosives Limited. . . . . Montreal.

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Robb Engineering Co., Limited. . . . Amherst, N.S.

Engines, Corliss
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Engines, Gasoline
Canadian Fairbanks Co. . . . . Montreal.
Ontario Wind Engine and Pump Co. . . . Toronto.

Engines, Hoisting
American Hoist and Derrick Co. . . St. Paul, Minn.
M. Beatty & Sons. . . . . Welland, Ont.
Canadian Fairbanks Co., Ltd. . . . . Montreal.

Engines, Stationary and Marine
Polson Iron Works. . . . . Toronto.
Robb Engineering Co., Limited. . . . Amherst, N.S.

Explosives
Standard Explosives Limited. . . . . Montreal.

Express Office Signs
Acton Burrows Limited. . . . . Toronto.

Feedwater Heaters
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McGregor Banwell Fence Co. . . . Walkerville, Ont.
Owen Sound Wire Fence Co. . Owen Sound, Ont.

Fire Brick
Mussens Limited. . . . . Montreal.

Flags
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Flour
The Hudson's Bay Co. . . . .

Fog Signals
International Marine Signal Co. . . . . Ottawa.

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Canada Car Co., Limited. . . . . Montreal.
Cleveland City Forge & Iron Co. . . . Cleveland, O.
Crossen Car Mfg. Co. . . . . Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd. . Hamilton, Ont.
Standard Steel Works Co. . . . . Philadelphia, Pa.

Foundry Appliances
Goldschmidt Thermit Co. . . . . Toronto.

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Standard Explosives Limited. . . . . Montreal.

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Standard Explosives Limited. . . . . Montreal.

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Gartshore-Thompson Pipe & F'dry Co. . Hamilton.

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McGregor Banwell Fence Co. . . . Walkerville, Ont.
Owen Sound Wire Fence Co. . . Owen Sound, Ont.

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Wolfe Brush Co. . . . . Pittsburg, Pa.

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Mussens Limited. . . . . Montreal.
Rice Lewis & Son. . . . . Toronto.
Toronto Pressed Steel C . . . . Toronto.

Hardware
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Rice Lewis & Son. . . . . Toronto.

Headlights
The N. L. Piper Railway Supply Co. . . . Toronto.
Pyle National Electric Headlight Co. . Chicago, Ill.

Headlinings
Crossen Car Mfg. Co. . . . . Cobourg, Ont.

Hoisting Machinery
American Hoist and Derrick Co. . . St. Paul, Minn.
Brown Hoisting Machinery Co. . . Cleveland, Ohio.
Canadian Fairbanks Co., Ltd. . . . . Montreal.

Hoists, Electric
American Hoist and Derrick Co. . . . St. Paul, Minn.

Hoists (Pneumatic)
Taylor & Arnold. . . . . Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co. . . . . Chicago, Ill.

Hydrants
Canadian Fairbanks Co., Ltd. . . . . Montreal.
Kerr Engine Co. . . . . Walkerville, Ont.

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Acton Burrows Limited. . . . . Toronto.

Inspections
R. W. Hunt & Co. . . . . Montreal.

Instruments, Surveying and Engineering
James Foster . . . . Toronto.

Interlocking Plant and Signals
Montreal Steel Works. . . . . Montreal.
Saxby and Farmer Ltd. . . . . Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd. . Hamilton, Ont.

Iron, Pig
Hamilton Steel & Iron Co., Ltd. . Hamilton, Ont.

Iron Signs
Acton Burrows Limited. . . . . Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co. . Cuyahoga Falls, Ohio.

Jacks
H and E Lifting Jack Co. . . . . Waterville, Que.
A. O. Norton. . . . . Coaticook, Que.
James Smart Mfg. Co. . . . . Brockville, Ont.

Japans
McCaskill, Dougall & Co. . . . . Montreal.

Journal Bearings
Canadian Bronze Co. . . . . Montreal.
Crossen Car Mfg. Co. . . . . Cobourg, Ont.
Kerr Engine Co. . . . . Walkerville, Ont.
Jas. W. Pyke & Co. . . . . Montreal.

Journal Boxes
N. J. Holden Co., Ltd. . . . . Montreal.
McCord & Co. . . . . Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co. . . . . Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry. . . . . Winnipeg.

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Canadian Westinghouse Co. . . . . . Hamilton, Ont.

Lamps and Lanterns
The Hudson's Bay Company. . . . .
The Hiram L. Piper Co. . . . . Montreal.
The N. L. Piper Railway Supply Co. . . . Toronto.

Launches
Polson Iron Works. . . . . Toronto.

Lights, Contractors' and Wrecking
Canadian Fairbanks Co., Ltd. . . . . Montreal.
F. H. Hopkins & Co. . . . . Montreal.
Mussens Limited. . . . . Montreal.

Locomotive Cranes
American Hoist and Derrick Co. . . St. Paul, Minn.

Locomotive Driver Brake Shoe
American Brake & Shoe F'dry Co. . Mahwah, N.J.
Canadian Iron and Foundry Co. . . . . Montreal.

Locomotive Gauges
Taylor & Arnold. . . . . Montreal.

Locomotive Lagging and Covering
Taylor & Arnold. . . . . Montreal.

Locomotive Pop Valves
Taylor & Arnold. . . . . Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co. . . . . . Philadelphia, Pa.
Canadian Locomotive Co. . . . . Kingston, Ont.
Montreal Locomotive Works (Ltd.). . . . Montreal.
H. K. Porter Co. . . . . Pittsburg, Pa.

Locomotives (Geared)
Lima Locomotive Co. . . . . Lima, O.

Locomotives (Electric)
Burnham, Williams & Co. . . . . . Philadelphia, Pa.
Canada Foundry Co. . . . . Toronto.
Montreal Locomotive Works (Ltd.). . . . . Montreal.

Locomotives (Logging)
Burnham, Williams & Co. . . . . . Philadelphia, Pa.
Canadian Locomotive Co. . . . . Kingston, Ont.

Locomotives (Rack)
Burnham, Williams & Co. . . . . . Philadelphia, Pa.
Canadian Locomotive Co. . . . . Kingston, Ont.
Montreal Locomotive Works (Ltd.). . . . . Montreal.

Locomotives (Steam)
American Car and Equipment Co.....Chicago, Ill.
Burnham, Williams & Co......Philadelphia, Pa.
Canada Foundry Co.....Toronto.
Canadian Fairbanks Co., Ltd.....Montreal.
Canadian Locomotive Co.....Kingston, Ont.
J. T. Gardner.....Chicago, Ill.
Hotchkiss, Blue & Co.....Chicago, Ill.
The W. H. Kelson Co.....Montreal.
Lima Locomotive Co.....Lima, O.
Montreal Locomotive Works (Ltd.).....Montreal.
H. K. Porter Co.....Pittsburg, Pa.
Vulcan Iron Works.....Wilkesbarre, Pa.

Locomotive Staybolts
Falls Hollow Staybolt Co. . Cuyahoga Falls, Ohio.
Flannery Bolt Co.....Pittsburg, Pa.

Lubricators
McCord & Co.....Chicago, Ill.
Taylor & Arnold.....Montreal.

Lumber
Parry Sound Lumber Co.....Toronto.

Machine Tools
W. Abbott.....Montreal.
Canadian Fairbanks Co.....Montreal.

Machinery, Power
Jno. McDougall, Caledonian Iron Works Co. Montreal

Machinery Special
Miller Bros. & Toms.....Montreal.

Machinery, Transmission
Canadian Fairbanks Co., Ltd.....Montreal.
Miller Bros. & Toms.....Montreal.

Manganese Steel Castings
Montreal Steel Works.....Montreal.

Manhole Frames and Covers
American Brake Shoe & F'dry Co. . . Mahwah, N.J.
Canadian Iron and Foundry Co.....Montreal.

Marine Repairs
Goldschmidt Thermit Co.....Toronto.

Marine Supplies
Rice Lewis & Son.....Toronto.

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The Orford Copper Co.....New York.

Nickel for Nickel Steel
The Orford Copper Co.....New York.

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Positive Lock Washer Co.....Newark, N.J.

Nuts, Square and Hexagon
Canada Foundry Co.....Toronto.
Toronto Bolt and Forging Co.....Toronto.

Oakum
The Hudson's Bay Company.....

Office Fittings
Canadian Office & School Furniture Co. Preston, Ont.

Office Signs
Acton Burrows Limited.....Toronto.

Oil Furnaces
Railway Materials Co.....New York City.

Oil Tanks
S. F. Bowser & Co., Limited.....Toronto.

Oils
Canadian Oil Co.....Toronto.
Galena Signal Oil Co. . Franklin, Pa., and Toronto.

Packing
Canadian Fairbanks Co., Ltd.....Montreal.
The N. L. Piper Railway Supply Co.....Toronto.

Paint Brushes
Wolfe Brush Co.....Pittsburg, Pa.

Painters' Dusters
Wolfe Brush Co.....Pittsburg, Pa.

Painters' Scrubs
Wolfe Brush Co.....Pittsburg, Pa.

Painters' Wall Brushes
Wolfe Brush Co.....Pittsburg, Pa.

Paints
Canadian Oil Co.....Toronto.

Pinch Bars
The N. L. Piper Railway Supply Co.....Toronto.

Pipe and Pipe Coverings
Wm. C. Baker Heating & Supply Co. . New York.

Pipe Stocks
Butterfield & Co.....Rock Island, Que.

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Standard Coupler Co.....New York City.

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Mussens Limited.....Montreal.
Toronto Pressed Steel Co.....Toronto.

Pneumatic Tools
N. J. Holden Co., Ltd.....Montreal.

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Babcock & Wilcox (Ltd.).....Montreal.

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The Hunter-Rose Co.....Toronto.
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S. F. Bowser & Co., Limited.....Toronto.
Canadian Fairbanks Co.....Montreal.
Canada Foundry Co.....Toronto.
Ontario Wind Engine and Pump Co.....Toronto.
James Smart Mfg. Co.....Brockville, Ont.

Pumps (Centrifugal)
M. Beatty & Sons.....Welland, Ont.

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F. H. Hopkins & Co.....Montreal.
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Drummond, McCall & Co.....Montreal.
J. T. Gardner.....Chicago, Ill.
J. J. Gartshore.....Toronto.
F. H. Hopkins & Co.....Montreal.

Rails (for relaying)
F. H. Hopkins & Co.....Montreal.
J. J. Gartshore.....Toronto.
Mussens Limited.....Montreal.
Jas. W. Pyke & Co.....Montreal.

Rail Joints
Goldschmidt Thermit Co.....Toronto.
The Rail Joint Co. of Canada.....Montreal.

Railway Pile Drivers
F. H. Hopkins & Co.....Montreal.
Mussens Limited.....Montreal.

Railway Supplies
Canadian Fairbanks Co.....Montreal.
The W. H. Kelson Co.....Montreal.
The Hiram L. Piper Co.....Montreal.
The N. L. Piper Railway Supply Co.....Toronto.
Rice Lewis & Son.....Toronto.

Reamers
W. Abbott.....Montreal.
Butterfield & Co.....Rock Island, Que.

Rivets, Boiler, Bridge and Structural
Toronto Bolt and Forging Co.....Toronto.

Rolled Wheels
Standard Steel Works Co.....Philadelphia, Pa.

Roof Trusses
Canadian Bridge Co.....Walkerville, Ont.
Dominion Bridge Co.....Montreal.

Rope
F. H. Hopkins & Co.....Montreal.
The Hudson's Bay Co.....

Rotary Snow Ploughs
Crossen Car Mfg. Co.....Cobourg, Ont.

Sash Balances
O. M. Edwards.....Syracuse, N.Y.

Sash Locks
O. M. Edwards.....Syracuse, N.Y.

Saw Steel
Montreal Steel Works.....Montreal.

Scoria Blocks
W. H. Knowlton.....Toronto.

Scrapers (Wheel and Drag)
F. H. Hopkins & Co.....Montreal.
Mussens Limited.....Montreal.
Toronto Pressed Steel Co.....Toronto.

Screw Plates
Butterfield & Co.....Rock Island, Que.

Screws, Coach and Lag
Toronto Bolt and Forging Co.....Toronto.

Semaphore Arms
Acton Burrows Limited.....Toronto.

Semaphores
The N. L. Piper Railway Supply Co.....Toronto.
Saxby and Farmer Ltd.....Montreal.

Sewer Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co. . Hamilton.

Shade Rollers
O. M. Edwards.....Syracuse, N.Y.

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See Purchasing Agents' Guide on page 833

See Alphabetical Index to Advertisements on page 801.

THE
Railway and Marine World
With which are incorporated The Western World and
The Railway and Shipping World, Established 1890

Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph,
Telephone and Contractors' interests

Old Series, No. 211.
New Series, No. 129.
TORONTO, CANADA, NOVEMBER, 1908.
For Subscription Rates, See page 801.
Entered as second-class matter, March 5, 1908, at the Post Office at Buffalo, N.Y., under the act of Congress of March 3, 1879.

C.P.R. Mechanical Employes' Strike.

On Oct. 4, the Department of Labor at Ottawa received a telegram from Bell Hardy, Winnipeg, representing the C.P.R. mechanical employes who were on strike, stating that they had decided to accept the award of the conciliation board, which they had previously refused to abide by, and against the enforcement of which they went on strike early in August. For some weeks before the men gave in it was evident that the strike could not succeed, as the company met with great success in filling the strikers' places, and brought out a considerable number of men from Great Britain. Representatives of the men tried to make terms with the company before capitulating, but the management adhered to its original decision and the outcome was a complete victory for the company. We are advised that no memorandum of agreement in connection with the termination of the strike was prepared. It was settled by the men notifying the Department of their acceptance of the conciliation board's award, and by the men calling off the strike on the eastern and western lines separately, the company's management promising to use all reasonable means to find employment for and prevent discrimination against men who went on strike.

Although a great deal of matter has been published in the daily press in regard to this strike, the full facts of the matter are not generally understood, and as they are of great importance to railway officials generally, and particularly to those of the operating and mechanical departments, we think the following full and authoritative statement will be read with interest:

On April 28 the Dominion Department of Labor received the application on behalf of the employes. The locality of the dispute was stated in the application to be along the eastern and western lines of the railway, but the application set forth the dispute only in the case of the employes on the western lines. The trades enumerated in the application as being concerned in the dispute were as follows: Boilermakers, eastern and western lines, members of the Brotherhood of Boilermakers and Iron Shipbuilders of America; machinists, eastern and western lines, members of the International Association of Machinists; iron moulders, eastern and western lines, members of Iron Moulders' Union of North America; blacksmiths and helpers, Fort William to Vancouver, members of the International Brotherhood of Blacksmiths and Helpers; boilermakers' helpers, Fort William to Broadview, members of Boilermakers' Helpers' Union no. 127; specialists and helpers of various trades mentioned, western lines, members of Federal Unions nos. 12, 14 and 15; specialists and helpers of various trades mentioned, Pacific Division, members of Federal Union no. 23; machinists' helpers, members of Machinists' Helpers Union no. 12610, all in the employ of the C.P.R. Co. The approximate estimate of the number of employes affected, or likely to be affected, was 1,770 directly and 1,600 indirectly.

The nature and cause of dispute were set forth in the application as follows: "On April 1 the C.P.R. Co. served notice of its intention to cancel on May 1 the agreements existing between it and the employes in its mechanical department on western lines, the said employes being organized according to the different trades represented by them as hereinbefore stated. In effect, the said notice provides for (1) contemplated reduction by company of wages on and after May 1. This is borne out by the fact that a number of employes affected by said notice have since received further notice of reduction in wages to take effect May 1; (2) cancellation of articles covering trade protection; (3) cancellation of articles covering rights of committees of employes to meet company's officers on behalf of men; (4) removal of restrictions on number of apprentices, and the cancellation of clauses covering advancement of apprentices. The employes object to cancellation of existing agreements, and contend that such agreements should continue to remain in force."

G. J. BURY,
General Manager, Canadian Pacific Railway, Western Lines.

The employes say that the action of the company in giving such notice constitutes an attempt on its part to deal with sections of particular trades at different times, and is intended to weaken, and has the effect of weakening unfairly, the position of employes in their negotiations with the company. The employes further claim that it is the intention of the company to cancel existing agreements on eastern lines as soon as differences on western lines have been settled. The employes maintain that agreements on both eastern and western lines should be considered and settled at one and the same time. Notice has been given to the company on behalf of employes, members of International Association of Machinists and Brotherhood of Boilermakers and Iron Shipbuilders of America, of their desire to amend at the present time existing agreements on eastern lines, because they believe it will be only a short time until the company asks for such amendment. The said employes, machinists and boilermakers, each have one organization covering employes on company's entire system, all of whom have expressed their intention of ceasing work in the event of eastern agreements not being considered with, and at the same time, as western agreements, or in the event of differences re agreements on western lines not being satisfactorily adjusted.

The parties signatory to the application were: W. McFarlane, President district 30, Boilermakers and Iron Shipbuilders of America; W. Henry, Secretary-Treasurer district 30, Brotherhood of Boilermakers and Iron Shipbuilders; B. Hardy, President, and J. H. McVety, Secretary, district 34, International Association of Machinists; O. L. Wark, President, and W. Mossop, Secretary, Iron Moulders' Union; W. Marshall, Chairman, and R. Anderson, Secretary, Blacksmiths' and Helpers' Committee; T. Gray, Chairman, and J. Moore, Secretary, Boilermakers' Helpers; E. Taylor, Chairman, and J. Chapman, Secretary, Federal Unions 12, 14 and 15; B. Hardy and J. H. McVety, representing Federal Union 23 and Machinists' Helpers' Union 12610.

The Board of Conciliation and Investigation was duly appointed. The company selected C. P. Fullerton, of Winnipeg; the men Jas. Somerville, of Toronto, and these two chose P. A. MacDonald, Master-in-Chambers, Winnipeg, as chairman. The enquiry was commenced May 18 and shortly afterwards the question arose whether the investigation should include the eastern as well as the western lines. The chairman, after having allowed an argument on this point by counsel before the Board, decided

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CHARLES MILLER,

PRESIDENT.

that it was impossible to adjust the dispute of the western lines without at the same time inquiring into condtions with relation to the eastern lines, and the chairman so reported to the Minister. Mr. Fullerton thereupon withdrew from the Board, and G. F. Galt, of Winnipeg, was appointed by the Minister of Labor, without a recommendation under sections 48 (2) and 8 (2) of the Act. J. Somerville was appointed on the recommendation of the employes, and the chairman, P. A. MacDonald, was appointed by the Minister, in the absence of a joint recommendation from the other members of the Board. The enquiry was resumed on June 3, and continued until July 8, the Board proceeding to Moose Jaw, Sask., on June 22, to take evidence there, and returning and resuming sessions at Winnipeg on July 2.

The Department received from the applicants, on June 8, a request that the original application might be amended by including within the scope of the Board's investigation the western carmen, and this request being supported by the usual statutory declaration, was duly complied with.

The investigation was by much the longest and most exhaustive held under the Industrial Disputes Investigation Act, the Board hearing evidence freely on the various points brought before it, several of which were of a technical or complicated nature. The decision of the Board that the eastern lines came within the scope of the investigation made the number of those directly or indirectly concerned in the dispute much larger than the original estimate, the increased number being placed at about 8,000. Several officials of the labor organizations concerned were present throughout the proceedings, as also were some leading officials of the C.P.R. western lines.

MAJORITY REPORT OF THE BOARD.

On July 16 P. A. MacDonald, chairman, and G. F. Galt, a majority of the Board, made the following report:

The dispute in question arose from the action of the C.P.R. Co. notifying its employes in the mechanical department on the Western Division of its road, of the termination of certain agreements, which were then in force, and which fully embraced the relations between the company and these particular employes. In substitution therefor, the company presented a set of rules for the government of its employes in the several trades.

The differences between the agreements in force and the rules proposed are as follows: Rule as to the definition of the machinists and boilermakers. Rule as to the method of dealing with grievances. Rule as to the proportion of apprentices to journeymen in each trade. Rule as to the method to be employed for reducing time in shops, where a reduction in the amount of work to be done necessitates either the cutting down of the staff, or the shortening of the hours of labor. Rule as to the make-up of the crews required in cases of wrecks. Rule as to the hours of labor in roundhouses. Rule regarding the duties of helpers to machinists.

Taking the questions in the above order, the Board finds: That the definition of the machinists' trade should be altered by eliminating the clause: "Drill presses, where a boring or facing tool is required, shall be operated on such work by machinists or apprentices."

2. For the old definition of a boilermaker, the company submit the following: First-class boilermakers to do testing, laying-out, fitting-up, and patching. Second-class boilermakers to do riveting, caulking, stay-bolting and tender work. Tubers, front end and back end. Netting and ashpan men. On this question the Board finds in favor of the company. The result of this finding being to add a class, no. 2, to this trade, it becomes necessary to fix a rate therefor, and the Board accordingly fixes such rate at 40 cents an hour.

On the question of the disposition of grievances, the company at first claimed that no committees should be recognized, but during the progress of the proceedings submitted that they would be satisfied to allow a clause similar to the provision in the agreement between the engineers and the company. The Board finds that the men have abundantly proved that they are entitled to committee representation, and recommends the adoption of the following clause as effective, fair and just:

"Employes having grievances, either specific or of a general nature, may present the case to his proper officer. If investigation is desired, the aggrieved party, or another employe representing him, may, during work hours, arrange with the foreman for same. Investigation to be held within 48 hours after such application, and in case a satisfactory adjustment cannot be made, the case may be referred to the next higher officer of the Department until the Manager is approached.

If, after investigation, the employe is found blameless, he will be paid for all time lost."

In all the trades the proportion of apprentices to journeymen has been fixed at one to five, and one for the shop. The evidence adduced before us shows that in all trades, excepting that of the machinists, there is no injustice being worked on either side, because the number of applicants for positions does not exceed the ratio provided. In the case of the machinists, the evidence is that a large number of applicants are prevented from learning this trade by reason of the limitation contained in this rule. Evidence was given to show that the work in the shops would not permit of a larger number of apprentices obtaining a proper knowledge of this trade. But this Board is of the opinion that the proportion might be enlarged and made one to four, and one for the shop, without injuring the education of such apprentices, and that the necessity for skilled labor, and the desirability of retaining and developing the boys of the country, rather than importing foreign mechanics, are features which compel attention and justify the Board in favoring this increase.

The rule regarding the reduction of expenses, at present in force, provides for a reduction in time of the whole staff, all the men being satisfied to accept a proportionate reduction in their earnings rather than that any should be discharged. The company wish to abolish this provision entirely, in order to permit of a reduction of the staff, but retaining the full day's work for those remaining in the employment. This Board recommends that no charge be made in this rule.

By rule in the machinists' schedule, it is provided that in case of wrecks, where it is necessary to disconnect or replace engines on track, two machinists shall accompany the wrecking crew. The company claim that this clause should be taken out, and on this point the Board find in favor of the company.

The company asked to have changed the rule with regard to the working hours as applied to roundhouses. At present work begins at 7 a.m. and ends at 17 o'clock. It is proposed that the men shall work in shifts, some beginning at 7 a.m., as at present, and ending at 17 o'clock, and others commencing at 8. a.m. and ending at 18 o'clock. The object of this change is to secure continued work in the roundhouses, with a diminution in overtime, a similar arrangement to apply to the night men. No good reason being advanced against this proposal, the Board recommends that this change be made.

The company ask that helpers to machinists should be allowed to use tools, under the direction of the machinists. The Board is not able to recommend this change.

It is the understanding of the Board that, except in so far as the present schedules are altered by the rulings as above, they shall continue in force.

At the time when this Board was constituted, the differences between the company and the employes on the Eastern Division of the road as to the details of their schedules had not been presented for consideration. Subsequently, the differences having reached a stage where the provisions of the Act could be invoked, application was made to the Department to have the Board deal therewith, the Minister of Labor, by letter, referring the matter to the Board, if, in its discretion, the questions could properly be decided at the same time with those already under consideration. The questions above reported upon are questions which are in dispute between the company and the men in the East equally with those on the Western Division, and this Board recommends that its findings should apply to the persons interested in the dispute in the East.

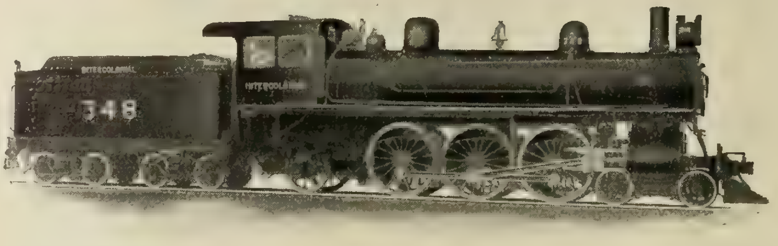
One other question remains for disposition, affecting only the employes on the Eastern Division, that is, the question of the right to a nine-hour, instead of a 10-hour day, with the rate of pay increased to make the earning capacity of the men under the nine-hour day equivalent to that under the 10-hour day provision. The position of the company as presented to us on this question is, that if the companies who are their competitors in business grant the nine-hour day in the East, that they will raise no objection to granting this application of their men. This statement of the Company, coupled with the knowledge of the Board, that the present conditions of business in this country are not such as to justify employers in increasing wages, enables this Board to dispose of that question by refusing to recommend that the change asked for be allowed. But this Board desires to express its confidence that the company will, as soon as they may, without injustice to themselves, change the working hours of their men from 10 to nine hours a day, with a corresponding increase in pay, along the Eastern Division of its road.

The question of the method to be adopted in the framing of agreements between the company and the men, whether the Eastern Division and the Western Division should be treated with at the same time, is one presented to the Board for consideration. After thorough discusion, it appeared that the wishes of the men were to deal by single committee with all trades at the same time and place. The company have explained that they have no objection to dealing with the men through one committee, but that on their part it will be necessary that this committee should meet with the officials of the company having to do with Western interests at Winnipeg, and with the officials of the company having jurisdiction over its Eastern matters at Montreal. The differences between the two parties to this reference, as above set forth, is so slight that the Board feels justified in holding that the schedules should be arranged by negotiations at Winnipeg and Montreal, to be consummated at a time agreed upon.

During the progress of the reference, a further application was received from the carmen, employes of the company, to be included amongst the employes interested in these proceedings. The question was referred by the Minister of Labor to the Board for their consideration, and the company agreeing thereto, it is considered that the carmen are entitled to the benefit of the findings of the Board as above.

The company, in the event of their position with regard to the abolition of the flat rate not being upheld, claim a decision

LOCOMOTIVES



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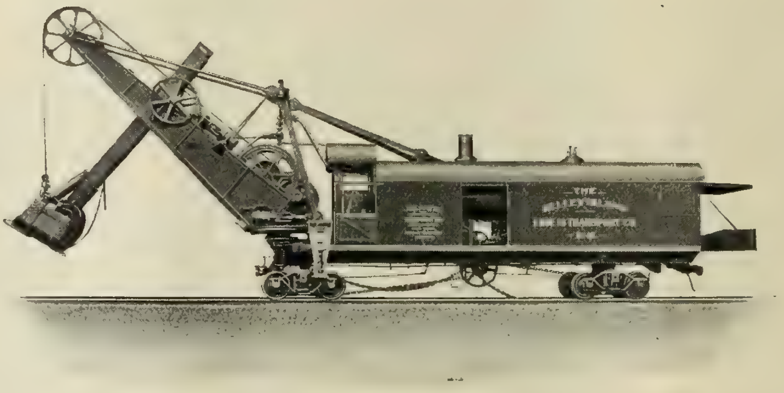

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of this Board, that the flat rate should be reduced to the extent of 2½c. per hour, and they have given evidence showing that the rate at present paid by the company to their employes is higher than men outside the service of the company are able to obtain. However, in the answer of the company to the Registrar, it is stated that under the sliding scale proposed, approximately 95% of the employes would receive the same wages as they are now receiving. The Board, therefore, does not feel called upon to give any recommendation for a reduction in rates.

It is recommended that the settlement should commence on Aug. 1, 1908, and should continue until May 1, 1909.

THE MINORITY REPORT.

I, J. Somerville, being unable to agree to the findings of the Board as submitted to the Department, beg to report as follows:

Taking the questions in the order set down in the report, I submit that: The operation of a boring bar in boring and turning on any kind of machine where sizing is to be done being recognized generally as machinists' work, no good purpose can be served by eliminating the specific clause. The evidence of the company has not shown any great advantage to be gained, while on the other hand, unnecessary disputes may arise through the change.

There is no justification in fact for the grading of boilermakers to what is termed class 2. The evidence before the Board all goes to show that in general practice a boilermaker is a boilermaker, competent to do any part of boilerwork, although in some instances the work is classified for the purpose of increasing the output. In such instances the evidence showed overwhelmingly that a flat rate prevailed in railway service without distinction as to what grade of work a boilermaker might be doing. The classification proposed tends to increasing the number of what is termed "specialists"—men with a knowledge of only part of a trade—and a corresponding decrease in the number of all-round mechanics. It places in the hands of foreman as powerful a weapon as the "sliding scale," and may be used just as unscrupulously.

The Board finds against the sliding sale and against a reduction in wages, but the introduction of this classification effects both, and is therefore misleading to the public. For instance, taking the evidence of the company's witnesses, and typewritten exhibits, 19 boilermakers out of the 36 employed in the Winnipeg shops, over 50%, are reduced 3½c. an hour immediately. Actual practice under the proposed classification reduces the number of what is termed first-class boilermakers to 8 in the Winnipeg shops, which means that at least 70% of the total employed can be reduced to the second class with a 3½c. per hour cut in wages. The evidence of the company went to prove that not more than four of the first class will be recognized in outside shops such as Moose Jaw and Fort William. At this ratio 22 out of the 30 men employed between Fort William and Broadview in the boiler trade, or over 70%, are cut 3½c. an hour. Between Broadview and Kamloops, of the 52 men employed, 38 or 70% are cut 5½c. an hour. Kamloops to Vancouver, where 11 men are at work, 7 or approximately 70% are reduced 4½c. an hour. The same classification carried into effect on the eastern lines as recommended by the Board means a sweeping reduction among the boilermakers there. The principle once admitted can be carried into any and all trades, destroying the men's earning powers through the lessening of the skill required to do a particular part of the boilerwork or a single part of what goes to make up what is recognized as a skilled trade. The all-round workman so much in demand at the present time will pass away entirely if he becomes less a man and more of a machine. The finding of the Board in this respect is a contradiction to other findings in the report—absolutely unfair and misleading. My report is against any change in the definition of a boilermaker.

Adjustment of grievances: I submit the following as fair and equitable: Employes having grievances, either specific or of a general nature, may present his case to the proper officer. If investigation is desired, the aggrieved party, or the chairman of the shop committee, may, during shop hours, arrange with the foreman for a meeting with the shop committee. If immediate investigation is not desirable, the foreman will remove as far as possible the cause for dispute, pending the investigation, which must be held within 24 hours after such application. If a satisfactory adjustment cannot be made the case may be appealed to the highest officer. If after an investigation a man is found to have been unjustly discharged or suspended, he shall be reinstated and paid for time lost. In connection with this article, there is one subject upon which the Board is silent, and which in my judgment should be commented upon in no measured terms. When a grievance or dispute arises between a foreman and an employe under his charge, it is the practice for the foreman to first tell his story to his superior, who afterwards hears what the aggrieved or committee has to say. The foreman is not called upon to face the accused, or accuser, as the case may be. The investigation thus becomes a farce. Instances were given before the Board, of investigation being refused in order to protect the foreman from exposure. This condition has continued to such a length that evidence taken before the Board under oath, charging a foreman with falsely maligning a man and actually tampering with his work for the purpose of discrediting him as a mechanic, is of no moment. That he should boast of the company upholding this nefarious practice is a question not worthy of contradiction. That a master mechanic should repudiate an undertaking given over his signature, in a statement to the men, and then make a directly contradictory one to the Board under oath, is of so little consequence to those higher in authority that relationships continue unchanged. Nothing worthy of refutation was the reply of the company's representative; nothing of moment. If a proper relationship is to be established between the men and the company, this condition will have to be changed, and the evidence presented to the Board places the onus on the company.

In the apportioning of the number of apprentices to the trades as one to four, the Board undertakes to upset offhand a general rule adopted throughout the North American continent in 1898, and recognized wherever an agreement is in existence with the trades to-day. If the question was one of first principles—whether it is right to place any limitation or not—then I could understand the attitude assumed by the Board, but I cannot concur in a finding arrived at without data or evidence. I submit the Board is not competent to judge of the fairness or unfairness of one to four or one to five, granted there should be any limitation.

Changing of working hours in roundhouses: While the system of lapping of hours does not commend itself, a trial of a few months will prove its effect or ineffectiveness as an eliminator of overtime, and without favoring the principle, I recommend that it be put in effect during the life of the proposed agreement.

Life of proposed agreement: I favor the usual 30-day clause for annulment, but if a longer period is desirable in the public interest, one year from date of acceptance would be reasonable.

On the other questions before the Board I am in accord with its findings, except on the one schedule for the system proposition, and the application of the eastern men. No evidence has been taken on either question, and the action of the company in holding out a compromise at this time is to my mind based on the principle of "settle out of court before judgment is rendered," and its acceptance by the Board prevents further exposure and a strengthening of the men's contention. The Board in my opinion is not justified in refusing evidence on these two important questions, for the only justification possible is in the strong opposition advanced by the company to the procedure. The men on the eastern have as much right to having their conditions investigated as the men in the West, and in this respect I dissent from the finding of the Board.

ACTION BY THE COMPANY AND THE MEN.

Copies of the majority and minority reports having been sent to the company, W. Whyte, Second Vice-President, Winnipeg, wired the Department of Labor July 24 as follows: "While the majority report of the conciliation board does not find in favor of the company on a number of its well-founded contentions, and is not to that extent satisfactory to the company, nevertheless, to assist in carrying out the spirit of the Act, I accept that portion of the decision relating to matters on western lines and will confirm by letter."

On the same day Mr. Whyte wrote the Department: "I am in receipt of your letter of the 20th inst., enclosing majority and minority reports of the conciliation board, the majority report being, I assume, the report of the Board. From the evidence submitted of facts as they existed prior to and at the time of the Board's meeting, the company expected a decision fully upholding its views and contentions. In so far as the decision does not do so, it is not satisfactory to the company, and although the company still contends that the position it took and the views it held and contended for are in their entirety correct, nevertheless, for the purpose of assisting in carrying out the spirit of the Act, the company will accept the Board's decision."

On July 29 the General Manager of the eastern lines wrote the Department: "Under all the circumstances and with a view to complying with the spirit of the Act, this company is prepared to accept the recommendation of the majority of the Board so far as these recommendations are applicable to the eastern lines. You have already received from this company's Second Vice-President at Winnipeg an intimation that the report of the Board will be accepted by him on behalf of the company's western lines, and while we consider that the company's contentions have not in some respects been given full consideration by the Board, we are prepared to accept it in toto, in order that the Board's work may not be rendered nugatory, and the object of the Act thereby defeated."

On July 31, T. J. Murray, on behalf of the employes, telegraphed the Department of Labor from Winnipeg as follows: "Findings of arbitration board on C.P.R. disputes not acceptable to employes on either eastern or western lines."

The foregoing has been compiled from the report as given in the Labour Gazette, the Department of Labor's official publication.

It is important to bear in mind that the C.P.R. was not represented in the arbitration by an arbitrator of its own selection. The company's representative, C. P. Fullerton, having withdrawn on account of the company's objection to include the eastern lines, G. F. Galt was appointed by the Min-

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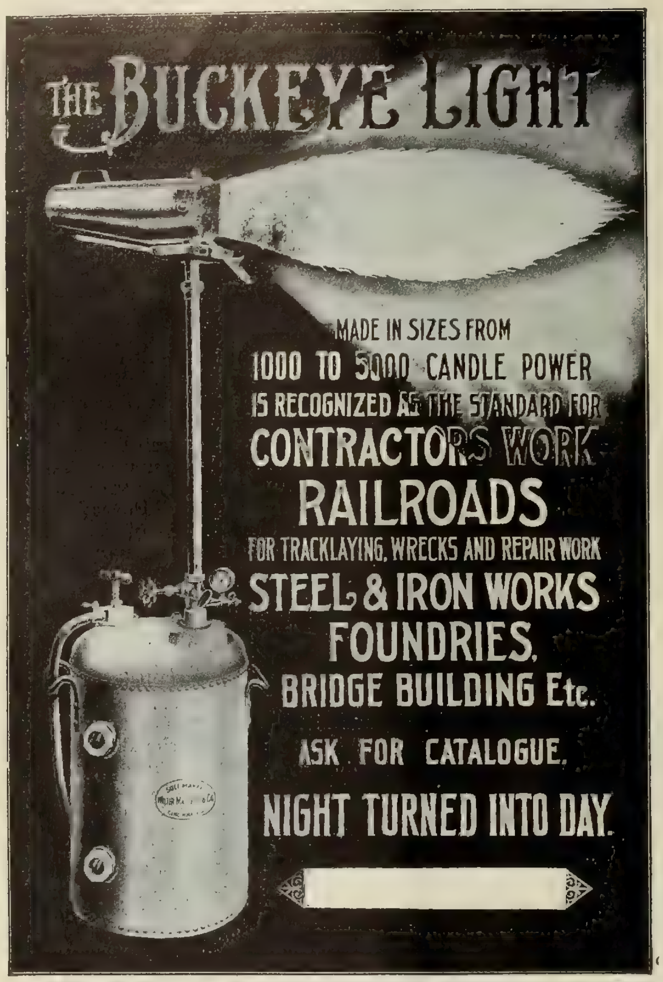

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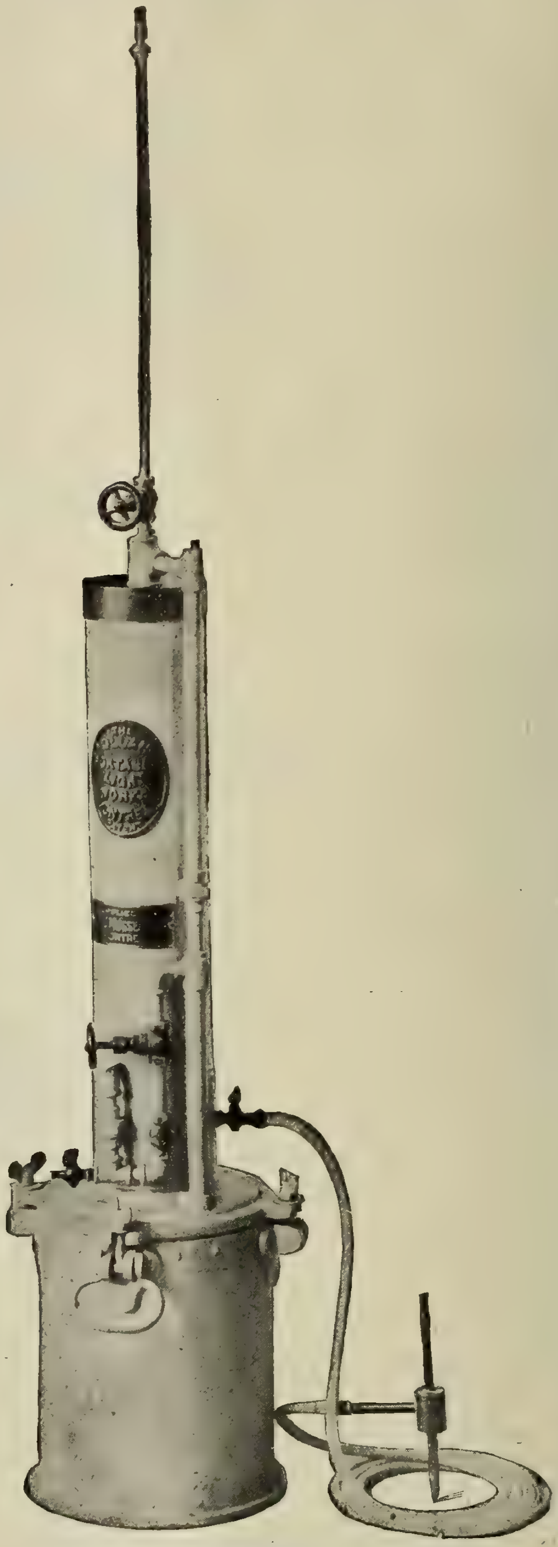

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ister of Labor, J. Somerville was nominated by the employes, and the chairman, P. A. MacDonald, was appointed by the Minister. It is the majority report of this tribunal which the employes refused to accept in the first instance, and against which they went on strike.

◆

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-08, from July 1, 1908:

	Earnings.	Expenses.	Net Earnings.	Net Increase or Decrease.
July..	$728,500	$ 525,600	$ 202,900	$159,000 –
Aug..	747,400	561,300	186,100	30,400 –
	$1,475,900	$1,086,900	$389,000	$189,400 –
Inc. or Dec.	$384,000 –	$194,600 –	$189,400 –	....

Approximate earnings for Sept., $901,700, against $758,300 for Sept., 1907; and for 2 weeks ended Oct. 14, $511,700, against $390,700 for same period 1907.

Mileage operated, 2,874.

◆

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-8, from July 1, 1908:—

	Earnings.	Expenses.	Net Profits.	Net Increase or Decrease.
J'ly	$6,292,880.82	$4,018,307.57	$2,274,573.25	$232,279.41 –
Aug.	6 385,956.69	3,807,057.98	2,578,898.71	8,623.56 +
	$12,678,837.51	$7,825,365.55	$4,853,471.96	$223,655.85 –
Inc. or Dec.	$1,339,614.35 –	$1,115,958.50 –	$223,655.85 –	......

Approximate earnings for Sept., $6,307,000 against $6,351,000 for Sept., 1907; and for 2 weeks ended Oct. 14, $3,210,000 against $2,998,000 for same period 1907.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for Aug., $222,548.93; expenses, $161,917.23; net earnings, $60,631.70; other income, $12,736.88; standing and other expenses, $92,897.36; deficit, $19,528.78; against, $333,138.84, gross earnings; $229,412.91 expenses; $103,725.93 net earnings; $9,705.10 other income; $94,925.80 standing and other expenses; $18,505.23, surplus for Aug., 1907. Gross earnings for 2 months ended Aug. 31, $448,633.91; expenses, $326,281.11; net earnings, $122,382.80; other income, $25,440.67; standing and other expenses, $185,130.04; deficit, $37,306.57; against, $663,051.04 gross earnings; $452,477.78 expenses; $210,573.26 net earnings; $18,316.47 other income; $192,257.46 standing and other expenses, and $36,532.27 surplus for same period, 1907. Approximate earnings for Sept., $250,884, against $304,403 for Sept., 1907.

MINERAL RANGE RD.—Gross earnings for Aug., $72,380.13; expenses, $56,037.39; net earnings, $16,342.74; other income, $21.89; standing and other expenses, $12,809.57; surplus, $3,555.06; against $76,294.39 gross earnings; $54,574.67 expenses; $21,719.72 net earnings; $99.30 other income; $11,954.56 standing and other expenses, and $9,864.46 surplus for Aug., 1907. Gross earnings for 2 months ended Aug. 31, $146,206.93; expenses, $116,935.56; net earnings, $29,271.37; other income, $21.89; standing and other expenses, $25,587.23; surplus, $3,706.03; against $148,633.07, gross earnings; $111,831.28, expenses; $36,801.79, net earnings; $1,443.03, other income; $24,590.68 standing and other expenses; and $13,654.14 surplus for same period, 1907. Approximate earnings for Sept., $73,253; against $68,161 for Sept., 1907.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for Aug., $961,360.27; expenses, $606,091.77; net earnings, $355,268.50; against $1,021,935.19 gross earnings; $653,677.86 expenses; $368,257.33 net earnings for Aug., 1907. Gross earnings for 2 months ended Aug. 31, $1,911,469.25; expenses, $1,162,899.79; net earnings, $748,569.46; against $2,116,825.07, gross earnings; $1,342,133.19, expenses; $774,691.88, net earnings, for same period, 1907. Approximate earnings for Sept., $1,510,934, against $1,086,776 for Sept., 1907.

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Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G.T.R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for Aug., as compared with Aug., 1907:

GRAND TRUNK RAILWAY.

	1908	1907
Earnings	$2,669,000	$3,146,300
Expenses	1,808,100	2,149,400
Net earnings	$ 860,900	$ 996,900

CANADA ATLANTIC RAILWAY.

	1908	1907
Earnings	$ 193,850	$ 209,300
Expenses	163,900	171,600
Net earnings	$ 29,950	$ 37,700

GRAND TRUNK WESTERN RAILWAY.

	1908	1907
Earnings	$ 516,370	$ 595,000
Expenses	353,370	469,100
Net earnings	$ 163,000	$ 125,900

DETROIT, GRAND HAVEN & MILWAUKEE RY.

	1908	1907
Earnings	$ 149,300	$ 191,900
Expenses	116,000	134,400
Net earnings	$ 33,300	$ 57,500

TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from July 1 to Sept. 30:

	1908.	1907.	Increase.	Decrease.
Grand Trunk	£1,626,704	£1,917,932	....	£291,228
Canada Atlantic	107,537	126,469	....	18,932
G. T. Western	300,990	354,622	....	53,632
D. G. H. & M.	92,616	106,538	....	13,922
Total.....	£2,127,847	£2,505,561		£377,714

Approximate earnings for Sept., $3,551,625, against $6,215,977 for Sept., 1907, and for 2 weeks ended Oct. 14, $1,676,319, against $1,856,238, for same period, 1907.

Mileage operated 4,523.

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G.T.R. Mogul and Switching Locomotives.

In addition to the 10 ten-wheeled passenger locomotives described in our Sept. issue, the G.T.R. has recently received from the Baldwin Locomotive Works 10 mogul type locomotives for freight service and 10 six-coupled locomotives for switching service. As in the case of the previous order, these were constructed, throughout, to drawings and specifications furnished by the G.T.R.

The mogul locomotives are examples of a type which has long been extensively used in freight service. Recent years have witnessed the introduction, on many roads, of heavier locomotives, having more elaborate wheel arrangements, but where train loads are comparatively moderate and the service is not too exacting, the mogul type is still performing efficient service.

The cylinders of the new G.T.R. locomotives are single expansion, and are equipped with balanced slide valves. The wheel spacing gives ample room for a simple arrangement of Stephenson valve motion, in which the link blocks are connected directly to the rockers, and all the parts are readily accessible. The main driving wheel centres are of cast steel, while the front and back centres are of cast iron. Cast steel is also used for the engine frames, driving boxes and crossheads. The main driving wheels have plain tires without flanges; the forward driving wheels are equalized with the leading truck in the usual manner. An interesting feature is the arrangement of the driving springs, which are underhung.

The boiler is of the extended wagon top type, with a long firebox placed above the engine frames. The longitudinal seams in the barrel are butt jointed and sextuple riveted. The firebox staying is radial, and the furnace equipment includes a brick arch which is supported on water tubes.

The switching locomotives are, in many respects, similar to those described above. They are carried on three pairs of driving wheels, without trucks. The total wheel base is 12 ft. 8 in., and as the main driving wheels have plain tires, the locomotive can traverse sharp curves without difficulty. The boiler is of the straight top design, with the firebox above the frames, and ample steaming capacity is provided for an engine of this type.

The tenders of both classes have steel frames built of 10-inch channels. The tender wheels of the switching locomotives are of chilled cast iron, while those of the mogul engines are steel tired with cast iron centres, and were supplied by the Standard Steel Works Co.

The principal dimensions of these locomotives are as follows, the weights given being estimated:

	Moguls.	Switching.
Cylinders	20″ x 26″	20″ x 26″
Driving-wheels, diameter	63″	56″
Boiler, diameter	62″	66″
Steam pressure, lbs.	200	190
Grate area, sq. ft.	33.4	27.4
Heating surface, sq. ft.	1,877	1,901
Driving-wheel base	15′ 8″	12′ 8″
Total wheel base, engine	24′ 3″	12′ 8″
" " " and tender	51′ 1″	42′ 4″
Weight on driving wheels, lbs.	138,000	140,000
Weight, total engine, lbs.	162,000	140,000
Weight, total engine and tender, lbs.	293,000	250,000
Tank capacity, gallons	6,000	5,000
Coal capacity, tons	10	10

November Birthdays.

Many happy returns of the day to—

A. B. Atwater, Assistant to 2nd Vice-President and General Manager G.T.R., for lines west of Detroit and St. Clair Rivers, Detroit, Mich., born at Sheffield, Ohio, Nov., 1845.

W. F. Brougham, Local Right-of-Way and Lease Agent C.P.R., Vancouver, B.C., born in Westmoreland, Eng., Nov. 25, 1865.

G. B. Burchell, General Manager Maritime Coal, Ry. and Power Co., Joggins Mines, N.S., born at Sydney, N.S., Nov. 1, 1877.

M. J. Butler, Deputy Minister of Railways and Canals, Ottawa, born at Deseronto, Ont., Nov. 19, 1856.

J. R. Cameron, General Superintendent Canadian Northern Ry., Winnipeg, born at Truro, N.S., Nov. 5, 1865.

F. H. Clendenning, City Freight Agent, C.P.R., Victoria, B.C., and District Freight Agent, Esquimalt and Nanaimo Ry., born at Montreal, Nov. 9.

F. Conway, acting General Superintendent Kingston and Pembroke Ry., Kingston, Ont., born at Ernestown, Ont., Nov. 19, 1850.

C. W. Cooper, Assistant General Passenger Agent Canadian Northern Ry., Winnipeg, Man., born at Montreal, Que., Nov. 16, 1868.

W. L. Creighton, Advertising Agent Intercolonial Ry., Moncton, N.B., born at Derby, Eng., Nov. 9, 1871.

W. Downie, General Superintendent C.P.R. Atlantic Division, St. John, N.B., born at Rock Currie, Ireland, Nov. 12, 1850.

Jos. Dubrule, Jr., Manager Canadian Pacific Car and Passenger Transfer Co., Prescott, Ont., born at Spencerville, Ont., Nov. 14, 1872.

Grant Hall, Superintendent of Motive Power, C.P.R. Western Lines, Winnipeg, born at Montreal, Nov., 1863.

C. R. Hosmer, director C.P.R., born at Coteau Landing, Que., Nov. 12, 1851.

J. McGillvray, Superintendent Inverness Ry. and Coal Co.'s lines, Inverness, N.S., born at Nairn, Scotland, Nov. 13, 1867.

T. E. Martin, Local Freight Agent, C.P.R., Quebec, Que., born at Beauharnois, Que., Nov. 23, 1852.

C. Murphy, General Superintendent, Eastern Division C.P.R., Montreal, born at Prescott, Ont., Nov. 20, 1865.

F. Nicholls, Vice-President Toronto Ry., director Canadian Northern Ry., born in England, Nov. 23, 1856.

H. P. Sharpe, General Agent Dominion Express Co., Toronto, born at Brockville, Ont., Nov. 24, 1864.

G. H. Shaw, Traffic Manager Canadian Northern Ry., Winnipeg, Man., born at Smith's Falls, Ont., Nov. 25, 1859.

F. M. Spaidal, General Superintendent Canadian Northern Quebec Ry., and Quebec and Lake St. John Ry., Quebec, born at Gananoque, Ont., Nov. 25, 1859.

J. Sparks, Assistant General Baggage Agent C.P.R. Western Lines, Winnipeg, Man., born in London, Eng., Nov. 25, 1874.

H. P. Timmerman, Industrial Commissioner C.P.R. Eastern Lines, Montreal, born at Odessa, Ont., Nov. 6, 1856.

H. E. Whittenberger, Superintendent Eastern Division G.T.R., Montreal, born at Peru, Ind., Nov. 9, 1864.

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The Brome County Asbestos Development Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $200,000 and office at Eastman, Que., with power among other things to construct and operate railway lines for the purposes of its business. The provisional directors are: C. A. Nutting, Waterloo; H. H. Williams, Broughton; W. Johnson, Montreal; and A. C. Lysle, Superintendent and Freight and Passenger Agent, Orford Mountain Ry., Eastman, Que.

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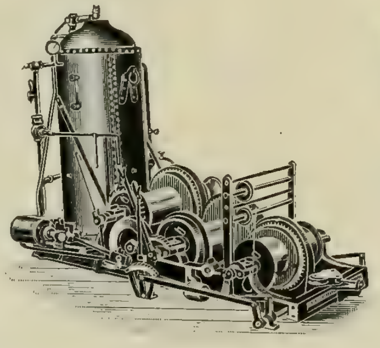
BEATTY & SONS, LTD.
HOISTING ENGINES
BUCKETS, ETC.



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CABLEWAYS
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CONSTRUCTION EQUIPMENT

LOCOMOTIVES - CARS - STEAM SHOVELS - TRENCH TOOLS, ETC.

PLANS AND ESTIMATES FURNISHED

THE CANADIAN FAIRBANKS CO., LTD.
MONTREAL

TORONTO ST. JOHN, N.B. WINNIPEG CALGARY VANCOUVER

Canadian Northern Railway Report.

The following directors' report, over the signature of W. Mackenzie, President, was submitted at the annual shareholders' meeting in Toronto Sept. 24:

The result of the operations for the fiscal year ended June 30, 1908, are as follows:

GROSS EARNINGS.

Passenger traffic	$1,846,086.77
Freight traffic	6,824,782.98
Express, mail, telegraph, dining and sleeping cars, interest and profits from elevators and other subsidiary companies	1,038,592.96
	$9,709,462.71
Working Expenses (including taxes, etc.)	$6,676,775.82
Net earnings	$3,032,686.89
Fixed charges	2,353,757.48
Surplus for the year	$ 678,929.41

The gross earnings show an increase over the previous year of $1,359,264.63, or 16.28%, and net earnings, a gain of $106,652.46, or 3.64%. While the percentages of increase in gross and net earnings are not as large, especially in net earnings, as in the preceding year, they give to your railway a unique position among the railways of the North American Continent during a year which has seen a heavy, though temporary, check to commercial development everywhere. That your railway is singular in being able to show increases in gross earnings that proportionately exceed the increased mileage operated, is a further evidence of the high quality of the country traversed, and of the prosperity which is yearly becoming more noticeable in all sections of it. Perhaps the most striking aspect of this improvement is in the gain from passenger receipts, which show an increase over the preceding year of $381,830.59, or 26%, and while part of this increase is no doubt due to the fact that this is the first complete year which your company has operated the Qu'Appelle, Long Lake and Saskatchewan Ry., between Regina and Prince Albert, the reports from the system generally show a steady and progressive advancement. The working expenses were 74.10% of the gross earnings of the railway proper, and 68.77% of the gross earnings from all sources, compared with 73.49% and 64.96% respectively, last year. The increase in working expenses is due to comparatively larger expenditures over last year in bringing up the standard of the roadbed and track, to enlarging station accommodation, freight shed, sidings and other necessary facilities to meet the increasing demands of traffic.

During May and June, the earnings of your railway, in common with all other large systems in North America, decreased, compared with the earnings of the corresponding period of 1907; the decrease was not, however, as serious as it appeared, and was the combined result of the heavy crop of 1906, the unprecedently severe winter of 1906-7, and of the light crop of 1907. As was stated in the last annual report, a large proportion of the crop of 1906 was blockaded during the winter; the movement did not again begin until May, 1907, and it continued during the summer months. During the winter of 1907-8, there was not so large a quantity of grain to handle, much new equipment was available, and the weather was as favorable as in the year before it had been unfavorable, with the consequence that very little grain remained to be handled in the spring, and the earnings, therefore, showed a rapid and deceptive decrease. The threshing returns of the crop of 1908 have so far produced results even better than were anticipated, and your directors are able to state that the revenue arising from its movement will far exceed any previous year. The chief factor in this increased movement is not so much the larger yield per acre under crop—although it is quite important—as the greater acreage under cultivation which has accompanied the construction of branch lines, and which more than justifies the construction of additional lines now under way, and others contemplated in the immediate future. While it is true that a substantial revenue accrues from the movement of grain of all kinds it is satisfactory to know that the company is not entirely dependent upon that class of traffic for revenue. The lumber and coal industries are increasing in importance, not only from the standpoint of consumption in the older settled towns and districts served by your railway, but also from the fact that the completion of the branch lines referred to provides additional new territory for these commodities.

During the year there have been large expenditures on maintenance and strengthening of roadbed, on relaying track with heavier steel, improving station accommodation, and enlarging the facilities for economical operation of the system. The shops and yards at Fort Rouge, Winnipeg—involving an outlay of $1,000,000—are in part completed, and have already proved of great benefit to your railway, furnishing as they do a very complete and up-to-date plant. During the year there have also been completed new engine houses at Brandon, Dauphin and Saskatoon. The contract for the Fort Garry station, Winnipeg, which your company is providing in conjunction with the Government of Canada and the Grand Trunk Pacific Ry., was let in the spring, and the work has proceeded all summer and will, it is hoped, be carried to completion in about 18 months. The station will be the most spacious, convenient, and substantial railway depot in Canada, and will be the property of your company, with the Transcontinental and Grand Trunk Pacific as tenants. These notable additions to your terminal facilities in Western Canada are coincident with the construction of new lines in various favored sections of Manitoba and Saskatchewan. Construction of the Brandon to Regina line was all but completed during the year, and a regular train service will be inaugurated toward the end of Sept. This line, besides securing to your company a share of the business of excellent country along 220 miles of railway, completes an alternative route from Winnipeg to Edmonton, and gives to Prince Albert its third route to Winnipeg over Canadian Northern lines. It will enable your company to inaugurate the first competitive passenger service to the City of Regina, and will give to the territory from Regina to Saskatoon, served by the Qu'Appelle, Long Lake and Saskatchewan Ry. (the bonds of which are guaranteed by your company), a more direct access to Winnipeg and to navigation than was previously available, and will make that railway even more valuable, as part of the Canadian Northern system.

During the year, by the direction of the shareholders, £2,000,000 of 4% perpetual consolidated debenture stock was sold, the proceeds of which, as far as received, have been applied to the general purposes of the railway, and the purchase of securities of companies whose business is incidental to the traffic of your railway. In devoting to this latter purpose $3,295,000, your directors have carried out their consistent policy of acquiring for your company the securities and control of such of the more important undertakings which are necessarily associated with railway transportation. These securities have been lodged with the trustee of the mortgage securing the 4% perpetual consolidated debenture stock. The companies whose securities have been acquired are: The Canadian Northern Coal and Ore Dock Co., the Lake Superior Terminal Co., operating at Port Arthur; the Canadian Northern Telegraph Co., operating over the entire system; the St. Boniface and Western Land Co., which holds valuable properties suitable for terminal and manufacturing purposes adjacent to Winnipeg properties; the Edmonton and Slave Lake Railway Co., under whose charter the line already constructed from Edmonton to Morinville, on the way to Athabasca Landing, and the Peace River Valley, has been constructed and is in operation.

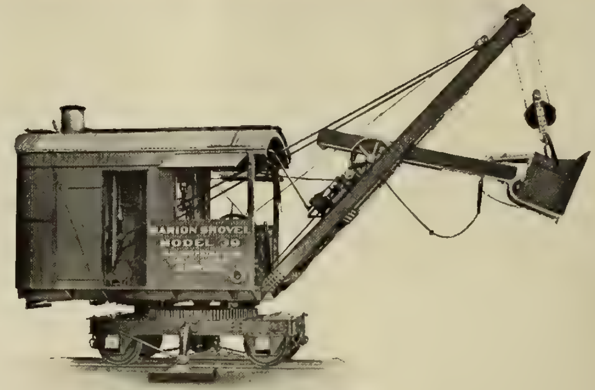
By the authority of the shareholders of your company, the first mortgage bonds of the Qu'Appelle, Long Lake and Saskatchewan Ry. were guaranteed as to principal and interest. The value of this property as revenue producing territory to your system has been amply demonstrated, the net earnings for the past fiscal year—although the crop of 1907 was less than usual—having been more than sufficient to meet the fixed charges on the bonds. Besides, the inclusion of this railway as part of your system has not only secured access to the rapidly growing city of Saskatoon, but it has rendered much easier the task of tapping the enormous wheat-growing area of Central Saskatchewan. The heavy grain traffic, too, arising from the territory between Saskatoon and Regina ensures from the beginning remunerative business for the new line between Regina and Brandon. From Saskatoon, the construction of the line to the Goose Lake district was undertaken during the year. Grading for 50 miles was completed during the fiscal year just closed, and since then track has been laid for that distance and will, it is expected, be completed for an additional 20 miles this season. The further extension of this railway will be through equally fertile territory in which your company has extensive land holdings, and to which settlers are proceeding in large numbers.

In order to meet the growing demands of traffic, your directors have made heavy purchases of rolling stock of all kinds, involving a large outlay. The delivery of this equipment has placed your company in an exceptionally favorable position to materially assist in the larger crop movement this coming fall, and the benefits will undoubtedly be amply reflected in the increased gross earnings.

The sale of your lands continues in satisfactory quantities. During the year, 414,696 acres were sold for $3,449,758.76, an average of $8.32 per acre. In respect of lands sold to June 30, 1908, there is $3,832,584.79 in the hands of the National Trust Co., in trust to retire land grant bonds amounting to $2,000,000, and $7,240,913.50 in deferred payments on sales, making a total of $11,073,498.29. The interest of our southern neighbors in the development of Western Canada is steadily growing. Besides the visits of landseekers, large numbers of journalists from the United States have travelled over your main line, and between Regina and Prince Albert, closely inspecting the crops, talking with the settlers and informing themselves of conditions generally. These parties have included men from practically every state in the Union, and their published accounts of what they saw have more than endorsed all claims made for the country. Your directors mention this feature of immigration here because it enforces the argument which has been reflected in previous reports in favor of the immigration to Canada of well-equipped Britons who will take a pride in developing one of the richest portions of the Empire.

The accounts and statistical tables appended to the report are submitted by D. B. Hanna, Third Vice-President, as follows:

"Marion" Revolving Steam Shovels



Built along the same lines in point of material and workmanship as the Marion large size shovels. These Revolving Shovels are built in two sizes, viz.:—$\frac{3}{4}$ and $1\frac{1}{4}$ cubic yard dippers and will stand up under the hardest work. The body of shovel revolves around a pivotal journal and is carried by five broad face conical steel rollers.

For a small, handy, quick acting, powerful steam shovel, there is nothing to approach either our Model 30 or Model 35.

Can we send you complete specification and blueprint?

All capacities—"Marion" Standard Steam Shovels—Immediate shipment

"Ransome"

High Tensile Twisted Steel

For Concrete Reinforcement

High Elastic limit and tensile strength.

Absolute safety can be secured by using Ransome Twisted Steel for your concrete reinforcing. For equal strengths, Ransome bars are Cheaper than plain bars because the ultimate strength of the steel is increased by twisting.

PROMPT SHIPMENT OF ALL SIZES
CUT TO SPECIFIED LENGTHS WITHOUT EXTRA CHARGE

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CONDENSED GENERAL BALANCE SHEET.

ASSETS.

Cost of railway and equipment		$85,732,583.22
Acquired securities (cost)		5,733,673.27
Advances to other companies		891,100.35
Advances to lines under construction and terminals at Winnipeg		1,979,044.72
Value of material and supplies on hand	$ 579,641.46	
Due from agents, station balances, etc	326,902.02	
		906,543.48
Deferred payments on land sales	$7,240,913.50	
Cash with National Trust Co., account of land sales	3,832,584.79	
		11,073,498.29
Instalments receivable account of 4% perpetual consolidated debenture stock		1,154,958.56
Cash on hand		1,501,933.83
		$108,973,335.72

In addition to above assets the company owns 1,413,555 acres of land in Manitoba and Saskatchewan.

LIABILITIES.

Capital stock		$30,750,000.00
Bonds and stock (guaranteed by Government)		26,647,730.04
Four per cent. perpetual consolidated debenture stock		24,054,716.65
Land grant bonds		2,000,000.00
Car trust obligations		9,628,790.76
Current liabilities—		
Unpaid pay rolls	$ 452,717.75	
Unpaid audited vouchers	814,347.47	
Due to other companies (net)	428,407.46	
		1,695,472.68
Coupons and dividend warrants due July 1	674,526.19	
Accrued interest on bonds and equipment securities	185,973.10	
		860,499.29
Equipment replacement fund		47,755.35
Gross land sales	$11,976,423.63	
Less		
Land grant bonds, as above, money to redeem which is in hands of National Trust Co.	2,000,000.00	
Surplus—		
Land grant account	$9,976,423.63	
Railway account	3,311,947.32	
		13,288,370.95
		$108,973,335.72

ACQUIRED SECURITIES.

Minnesota & Ontario Bridge Co.—	
4½% 1st mortgage debenture bonds	$ 180,000.00
Capital stock	100,000.00
Minnesota & Manitoba Rd.—	
5% general mortgage bonds	250,000.00
Capital stock	400,000.00
Lake Superior Terminals Co., Ltd.—	
5% mortgage gold bonds	2,000,000.00
Capital stock	500,000.00
Canadian Northern Telegraph Co.—	
5% general mortgage bonds	800,000.00
Capital stock	500,000.00
Winnipeg Land Co., Ltd.—	
5% 1st mortgage gold bonds	300,000.00
Capital stock	100,000.00
Canadian Northern Coal & Ore Dock Co.	
5% 1st mortgage bonds	375,000.00
St. Boniface & Western Land Co.—	
5% 1st mortgage bonds	750,000.00
Capital stock	250,000.00
Edmonton & Slave Lake Ry. Co.—	
5% 1st mortgage bonds	420,000.00
Canadian Northern Prairie Lands Co.—	
Capital stock	492,006.61
	$7,417,006.61

INCOME ACCOUNT, JUNE 30, 1908.

Operating expenses		$ 6,623,271.60
Taxes		53,504.22
Rentals of Leased Lines:		
Northern Pacific & Manitoba Ry	$210,000.00	
Minnesota & Manitoba Rd	13,960.00	
		223,960.00
Interest on equipment securities		431,247.82
Accrued interest to June 30, 1908	185,973.10	
Less accrued interest at June 30, 1907, paid during current year	149,392.08	36,581.02
Balance of income account		3,311,947.32
		$12,379,061.64
Balance of income account, June 30, 1907		$ 2,669,598.93
Gross earnings		9,709,462.71
		$12,379,061.64
Balance at credit		$ 3,311,947.32

DETAILS OF FIXED CHARGES.

Four per cent. bonds guaranteed as to principal and interest by Manitoba Government—

Amount.	Date of Issue.	Annual Charge.
4%, £2,436,200	June 30, 1904	$427,989.03
4%, £1,180,600	Sept. 30, 1901	230,754.18

Three per cent. stock guaranteed as to principal and interest by Dominion Government—

£1,923,287	July 29, 1903	$280,799.90

Four per cent. perpetual consolidated debenture stock—

£4,942,750		$577,539.10

Qu'Appelle guaranteed 4% 30 year mortgage debenture stock—

£922,309	Oct. 17, 1906	$179,540.25
6,600	(6% 1st Mort. Bonds, 1911)	1,927.20
Leased Lines—		
Northern Pacific and Manitoba Ry		$210,000.00
Minnesota and Manitoba Rd		13,960.00
Interest on equipment securities		431,247.82
		$2,353,757.48

GROSS EARNINGS.

Class.	Amount.	Per Cent.
Passenger	$1,846,086.77	19.01
Freight	6,824,782.98	70.29
Mails	72,919.50	00.75
Express	107,266.21	01.10
Miscellaneous	858,407.25	08.85
Total	$9,709,462.71	100.

OPERATING EXPENSES.

Class.	Amount.	Per Cent.
Maintenance of way and structures	$1,486,030.04	22.26
Maintenance of equipment	1,330,067.52	19.92
Traffic expenses	120,283.85	01.80
Transportation expenses	3,486,638.09	52.22
General expenses	253,756.32	03.80
Total	$6,676,775.82	100.

DESCRIPTION OF FREIGHT CARRIED.

	1907–1908.	1906–1907.
Flour, sacks (100 lbs. ea.)	925,798	844,500
Grain, bushels	22,456,041	19,853,142
Live stock, head	44,639	32,960
Logs and lumber, feet	206,698,000	189,455,000
Firewood, cords	197,633	109,685
Fish, tons	4,435	3,402
Immigrants' effects, cars	3,383	4,647
Building material (lime, stone, brick, sand, etc.). cars	9,432	9,046
Miscellaneous, tons	1,133,508	628,521

PASSENGER TRAFFIC.

	1908.	1907.
Number passengers carried	937,036	703,988
Number passengers carried one mile	74,468,415	60,683,505
Earnings per passenger per mile	cts. .02.381	.02.413
Earnings per traffic train mile	1.06.704	1.18.601
Total passenger train earnings	$2,026,272.48	$1,720,424.38

FREIGHT TRAFFIC.

Number tons carried	2,615,580	1,822,220
Number tons carried one mile	875,287,887	657,437,305
Earnings per ton per mile	Cts..00.779	.00.873
Earnings per traffic train mile	2.71.795	2.54.139
Total freight train earnings	$6,824,782.98	$5,741,729.25

PASSENGER AND FREIGHT TRAFFIC, ETC.

Gross earnings per mile of road	$3,387.81	$3,328.09
Operating expenses per mile of road	2,329.65	2,161.88
Net earnings per mile of road	1,058.16	1,166.21
Amount required per mile of road to pay fixed charges, including leased lines	821.26	750.27

TRAIN AND CAR MILEAGE.

Mileage of passenger trains	1,898,970	1,450,590
Mileage of freight trains	2,511,004	2,259,279

EXPENSES PER TRAFFIC TRAIN MILE.

Maintenance of way and structures	cts.	33.70	cts.	33.99
Maintenance of equipm't.	cts.	30.16	cts.	27.85
Traffic expenses	cts.	02.73	cts.	02.45
Transportation expenses	cts.	79.06	cts.	76.04
General expenses	cts.	05.75	cts.	05.88
Total		$1.51.40		$1.46.21

SUMMARY OF EQUIPMENT.

	June 30, 1908.	June 30, 1907.
Locomotives	290	190
Sleeping and dining cars	35	29
Passenger coaches	122	108
Baggage and mail and express cars	70	48
Business cars	6	6
Freight, refrigerator and stock cars	8,065	6,868
Conductors' vans	104	97
Boarding, tool, auxiliary cars, steam shovels and snow equipment	126	123

MILEAGE OWNED AND OPERATED.

The total number of miles of railway owned and operated, including leased lines, at June 30, was 2,894.9, located as follows: Ontario, 353.7; Manitoba, 1,427.2; Saskatchewan, 856.1; Alberta, 214.2; Minnesota, 43.7.

The report was unanimously adopted at the annual meeting, and the directors re-elected. The following are directors for the current year: President, W. Mackenzie; Vice-President, D. D. Mann; other directors, Z. A. Lash, F. Nicholls, Toronto; R. M. Horne-Payne, London, Eng.

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G.T.R. Betterments, Construction, Etc.

A Block System.—A press report states that the next important work which will be undertaken by the company will be the installation of a block system on the main line between Montreal and Sarnia, Ont., and between Port Huron, Mich., and Chicago, Ill.; that work is estimated to cost $1,350,000, and that a beginning will be made on the installation early in 1909.

Turcot Roundhouse.—The roundhouse at Turcot, a westerly suburb of Montreal, has accommodation for 57 locomotives, each stall being 85 ft. long; the turntable is 100 ft. long. This roundhouse was opened at the end of 1906, with 40 stalls, and since then the remaining 17 have been added. It is completely equipped with telephones, electric lighting, coal chutes, storehouses, and everything else necessary.

Ottawa Central Station.—In an interview at Ottawa, Oct. 13, W. Wainwright, Fourth Vice-President, said tenders had been received for the baggage annex at the Central station, which is to be used temporarily for station purposes until the new structure is completed. The contract, he said, is to be awarded at once, and it is hoped that work will be started right away. The deed from the Crown for the site for the hotel in the Major's Hill Park was in the hands of the company for examination, and as soon as it was executed tenders would be asked for the building.

In connection with the plans of the station and hotel, it was reported from New York, Oct. 8, that B. L. Gilbert, the architect who prepared the original plans, had engaged counsel to take legal action in connection with their rejection.

Stratford to Goderich.—The work of relaying the line between Stratford and Goderich, Ont., has been completed as far as Holmesville. The old 57-lb. rails taken up have been shipped west for use on the G.T. Pacific Ry., and the 80-lb. rails which have been laid were brought from the main line near Sarnia, where 100-lb. rails have been laid. Considerable improvements are to be made at Holmesville, notably some reduction in the gradients, so that it will be possible to work trains of 20 loaded cars by means of one locomotive. At Goderich a new turntable is being put in, and considerable improvements are being made at the roundhouse.

Huron and Bruce Ry.—Owing to the increased traffic over this line it has been decided to erect a new station and to put in a new siding at Hyde Park, Ont. The new station will be erected at once. U. E. Gillen, Superintendent, and G. Mitchell, Master of Bridges and Buildings, were at Hyde Park, Oct. 16, selecting the site and arranging for the construction.

A paragraph on pg. 709 of our Oct. issue, under "Middle Division Improvements," stated that "the new station at Walkerville, Ont., is nearly completed." This should have been Walkerton, Ont.

London, Ont.—Work has been commenced on the new Hyde Park station, which is being built on the site of the old one.

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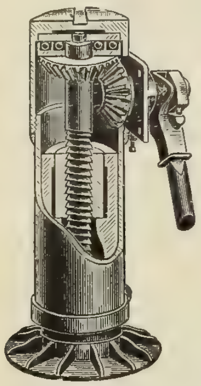
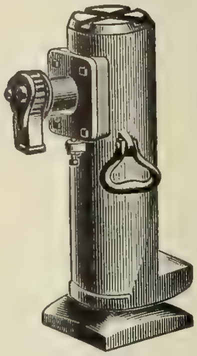
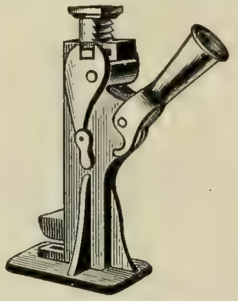
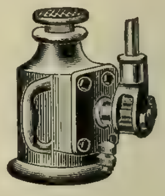
50 Styles 8 to 70 Tons Capacity
Carried in stock for IMMEDIATE DELIVERY


Sectional View


Foot Lift Jack


15 Ton Track Jack

Traversing Jack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CANADA FOUNDRY COMPANY

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C.P.R. Annual Meeting.

The 27th annual meeting of shareholders was held in Montreal, Oct. 7, Sir Wm. C. Van Horne, Chairman of the Board, presiding. The President, Sir Thos. G. Shaughnessy, in moving the adoption of the report for the year ended June 30, which was published in our Oct. issue, said:

The estimate of the western crops made a year ago was not far astray as to quantity, but the quality was seriously affected by bad weather, and, therefore, the amount realized by the producers was much below the average.

About the end of Oct. there was a disarrangement of business affairs approaching a panic in the United States, and the feeling of uncertainty and distrust reached Canada in a more rational and less pronounced form, resulting in a drastic but prudent contraction of bank credits and a consequent shrinkage of business activity in all lines of manufacture and commerce. These conditions had a serious effect on your business, but more particularly on your westbound and local traffic, with the result that your gross income showed important decreases month by month, without any possibility of making reductions, that were at all commensurate, in the cost of transportation. Your directors, convinced that the depression was but temporary, did not feel warranted in changing their policy by curtailing the expenditure for the maintenance of the railway and equipment. As a consequence your gross income was $833,000, and your net revenue $3,500,000 below the previous year. The crop just harvested is bountiful and of excellent quality, and we have every reason to believe that there will be an early return of sound and active business conditions.

Fair progress has been made during the year with all the works of construction and improvement that were in hand, but it is very desirable that the several railway lines now being built should be brought to completion before other works of a like character are undertaken, and, therefore, your directors have decided to restrict operations in this respect, for the present at any rate.

As explained in the annual report, you will be asked at the special general meeting, to be held immediately after this meeting, to sanction an increase in the ordinary capital stock from $150,000,000 to $200,000,000 and to empower your directors to utilize the additional stock in such amounts from time to time as may be desirable in connection with the company's capital requirements. It is not easy to designate in advance, with any degree of particularity, the purposes for which money will be required, excepting in the matter of rolling stock. In the six years, 1902 to 1908, there was an increase in your equipment of 659 locomotives, 842 sleeping cars and day coaches, and 25,190 freight cars, at an approximate cost of $37,000,000. This is equivalent to one locomotive every three working days, one passenger car every two days and 14 freight cars each day during the entire period of six years, and yet the prospects are that within the next six weeks the demand will be in excess of the supply of freight cars. While it is a healthy sign to have a shortage rather than an excess of equipment, it is due to the public, and in the best interests of the company, that neither money nor effort should be spared to meet the reasonable requirements of shippers along your line, and, therefore, we must continue to build or purchase locomotives and cars as quickly as the development of traffic may warrant. In the ordinary course of events the volume of traffic on your lines should increase with a fair degree of rapidity, and an expansion of traffic necessarily involves not only additional cars and locomotives, but enlarged accommodation and greater facilities to care for it at very many new places over your 9,500 miles of railway, and in providing these, large sums of money are quickly absorbed. You will, I am sure, recognize the desirability of having your financial arrangements in such shape that your directors can, without avoidable delay, secure funds for your purposes at intervals as circumstances may justify or require, and to that end will invest them with the proposed powers.

The distribution from the land interest account will be the same in the current year as in the last, namely, 1% in two semi-annual instalments of ½% each.

The resolution adopting the report was seconded by R. B. Angus, and adopted unanimously.

The following resolutions were also adopted:

That the shareholders desire to record their deep sense of the loss sustained by the company in the death of Sir Robert G. Reid, who for several years occupied a seat on the board, and whose high character, wide experience and sound judgment made his counsel of so much value.

That the shareholders have heard with great regret of the death of C. Drinkwater, who had been Secretary of the company since its incorporation, and who, during the last nine years, had also been Assistant to the President; his intimate knowledge of the company's affairs had made his services of unusual value, and they desire to record their sense of the loss sustained by the company in his death, and their high appreciation of his devotion to its interests during his long term of service.

The retiring directors, Sir George A. Drummond, Sir Sandford Fleming, W. D. Mathews, and R. Meighen, were re-elected for a further term of four years.

The meeting was thereupon made special for the purpose of considering an increase of the ordinary capital stock of the company, by an amount not exceeding $50,000,000, in accordance with the notice to the shareholders; and the following resolution was unanimously adopted: Whereas the authorized ordinary capital stock of this company is $150,000,000, divided into 1,500,000 shares of the par value of $100 each, and it is deemed advisable in the interests of the company to increase the same to $200,000,000; and whereas this meeting has been duly called for the purpose of authorizing such increase, all preliminary legal requirements having been complied with; now therefore it is resolved that, an increase of the company's ordinary capital stock, to the extent of 500,000 shares of the par value of $100 each, be and the same is hereby authorized and approved; that the said increase of ordinary capital stock be issued by the directors from time to time according to the requirements of the company and be disposed of by the directors in such manner and form, at such price not less than par, at such times, and upon such terms of payment as the directors may determine; and that the proceeds of the said increase be applied in improving the company's property and adding to its facilities and equipment from time to time, in order to meet the commercial requirements of the country and to secure the most convenient and economical handling of the company's traffic, in such manner and at such times as the directors may determine.

At a meeting of directors, held immediately after the shareholders' meeting, the following officers were re-elected: Chairman of the Board, Sir Wm. C. Van Horne; President, Sir Thos. G. Shaughnessy; Vice-President, D. McNicoll; Executive Committee, Sir Wm. C. Van Horne, Sir Thos. G. Shaughnessy, Lord Strathcona, E. B. Osler, D. McNicoll and R. B. Angus.

In quoting from the annual report in our last issue, the years to which some of the comparative figures referred were inadvertently transposed. The following table gives the figures for the year 1907-8 and the previous year, in correct order.

TRAIN TRAFFIC STATISTICS.

TRAIN MILEAGE.

	1907-8	1906-7
Passenger trains	13,196,093	12,413,638
Freight "	17,788,649	18,187,263
Mixed "	1,798,673	1,411,870
Total trains	32,783,415	32,012,771

CAR MILEAGE.

Passenger—	1907-8	1906-7
Coaches and P.D. and S. cars	63,744,049	63,025,195
Combination cars	2,875,441	2,437,214
Baggage, mail and express cars	26,689,471	22,938,883
Total passenger cars	,293, 88,104	896410,93
Freight—	**1907-8**	**1906-7**
Loaded	327,388,310	347,181,189
Empty	94,125,570	83,131,642
Caboose	18,735,988	19,646,800
Total freight cars	440,249,868	449,959,631
Passenger cars per traffic train mile	6.22	6.39
Freight cars per traffic train mile	22.48	22.96

PASSENGER TRAFFIC.

	1907-8	1906-7
Passengers carried (earning revenue)	9,334,811	8,671,438
Passengers carried (earning revenue) one mile	1,038,393,535	1,052,286,316
Passengers carried (earning revenue) one mile per mile of road	112,716	117,330
Average journey per passenger miles	111.24	121.35
Average amount received per passenger $	2.08	2.17
Average amount received per passenger mile cts.	1.87	1.79
Average number of passengers per train mile	69.25	76.10
Average number of passengers per car mile	15.58	16.38
Revenue from passengers per passenger car mile cts.	29.15	29.35
Total passenger train earnings per train mile $	1.56	1.63
Total passenger train earnings per mile of road	197.542.15	$.7,2,23

FREIGHT TRAFFIC.

	1907-8	1906-7
Tons of revenue freight carried one mile	5,699,092,014	5,789,191,940
Tons non-revenue freight carried one mile	984,489,076	870,757,856
Total tons (all classes) freight carried one mile	6,683,581,090	6,659,949,796
Tons of revenue freight carried one mile per mile of road	618,626	645,532
Tons of non-revenue freight carried one mile per mile of road	106,864	97,095
Total tons (all classes) freight carried one mile per mile of road	725,490	742,627
Average amount received per ton per mile of revenue freight cts.	0.755	0.776
Average no. of tons of revenue freight per train mile	290.96	295.38
Average no. of tons of non-rev. freight per train mile	50.26	44.46
Average no. of tons of (all classes) freight per train mile	341.22	339.84
Average no. of tons of revenue freight per loaded car mile	17.41	16.67
Average no. of tons of non-rev. freight per loaded car mile	3.01	2.51
Average no. of tons of (all classes) freight per loaded car mile	20.42	19.18
Freight train earnings per loaded car mile cts.	13.14	12.94
Freight train earnings per train mile $	2.20	2.29
Freight train earnings per mile of road $	4,671.13	5,009.18

The earnings of lake and river steamers are not included in this statement.

The Maritime Coal Co., Ltd., is the proposed name of a company making application for incorporation under the New Brunswick Joint Stock Companies Act. Amongst the powers sought are the construction of buildings, tramways, canals, wharves, bridges, piers, docks, terminals, shipping facilities, and any other works for operation by steam, electricity or other motive power. The capital of the proposed company will be $2,500,000, the offices at Moncton, N.B., and the following are named as provisional directors: H. VonHagen, New York; I. Purdy, Purdy's Station, N.Y.; W. G. Kennedy, J. M. Seeley, New York; M. F. Keith, Moncton, N.B.; E. O. Seeley, Maccan, N.S.; E. Mead, Adamsville, N.B.; all officials of the North Shore Ry. Co. (formerly Beersville Coal and Ry. Co).

ADDITIONAL SAFETY AND ECONOMY IN

TRACK MAINTENANCE

has been proved by the use of Continuous, Weber and Wolhaupter base-supported rail joints—after fourteen (14) years' service, having a record of over **50,000 miles in use** the extent of which is evidence of their excellence.

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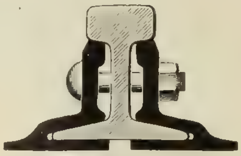
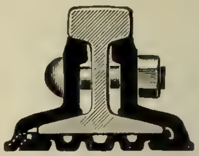
Buffalo, 1901; St. Louis, 1904


CONTINUOUS JOINT

Over 50,000 miles in use

WEBER JOINT

Rolled from Best Quality Steel


WOLHAUPTER JOINT

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Car heating by controllable direct steam and water circulating systems steam tight couplers, traps, train pipe valves and other appliances. ∞ ∞ ∞

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G.T.R. SEMI-ANNUAL MEETING.

The report for the half-year ended June 30 was submitted to the shareholders at a meeting in London, Eng., Oct. 8. The following summary compares the half-year's revenue account with that of the corresponding half year ended June 30, 1907:

June 30, 1907.		June 30, 1908.
£3,381,260	Gross receipts	£ 2,919,192 2 2
	Deduct—	
2,486,544	Working expenses, being at the rate of 73.22%, as compared with 73.54% in 1907	2,137,287 13 3
£ 894,716	Net traffic receipts	£ 781,904 8 11
	Add—	
16,013	Amount received from International Bridge Co.	16,012 16 7
6,507	Interest on Central Vermont Ry. bonds	6,506 14 3
60,310	Interest on securities of controlled lines and on St. Clair tunnel bonds acquired by issue of G. T. 4% debenture stock	60,310 11 11
48,247	Balance of general interest account	40,936 15 2
£1,025,793	Net revenue receipts	£ 905,671 6 10

June 30, 1907.		June 30, 1908.
£ 77,603	Rents (leased lines)	£ 77,603 0 9
489,729	Interest on debenture stocks and bonds of the Co.	494,440 19 0
44,372	Interest on debenture stock and bonds of lines consolidated with the G.T. Co.	37,667 10 11
87,800	Canada Atlantic Ry. deficit.	68,891 14 10
10,970	*Deduct* —Detroit, Grand Haven, and Milwaukee Ry. deficiency	46,573 13 9
£ 710,474		£ 725,176 19 3
315,319	Leaving a surplus of	180,494 7 7
£1,025,793		£ 905,671 6 10

Adding the balance of £6,753 11s. 10d. at the credit of net revenue account Dec. 31, 1907, to the above surplus of £180,494 7s. 7d., the total available for dividend is £187,247 19s. 5d., from which the directors recommend the payment of the full half-year's dividend on the 4% guaranteed stock, amounting to £185,622 0s. 3d., leaving £1,625 19s. 2d. to be carried forward to next half-year's account.

Following is a comparison of receipts for the half-years ended June 30, 1908, and 1907:

Description of receipts.	1908.	1907.	Increase.	Decrease.
	£	£	£	£
Passengers	841,503	889,281	....	47,778
Mails and express	136,584	142,202	....	5,618
Freight and live stock	1,854,408	2,271,948	....	417,540
Miscellaneous	86,697	77,828	8,869	....
	£2,919,192	£3,381,259	....	£462,067

TRAFFIC STATISTICS.

	1908.	1907.	Decrease.
Passengers carried	4,800,036	4,936,016	135,980
Average fare per passenger	42.07d.	43.24d.	1.17d.
Tons of freight and live stock	7,223,000	8,510,574	1,287,574
Average rate per ton	61.62d.	64.07d.	2.45d.
Tons carried one mile	1,299,205,532	1,626,383,387	327,177,855
Earnings per train mile	75 05d.	80.49d.	5.44d.

The average rate per ton per mile on the entire freight business was 0.69 of a cent, compared with 0.68 of a cent in the corresponding half-year.

The working expenses, excluding taxes, were £2,096,053, or 71.80% of the gross receipts, compared with £2,445,662, or 72.33%; a decrease in amount of £349,609, and in the proportion to the gross receipts of 0.53%.

The following table compares the revenue expenditure, including taxes, for the half-years ended June 30, 1908 and 1907:

Description of expenditure.	1908.	1907.	Increase.	Decrease.
	£	£	£	£
Maintenance of way and structures	246,575	287,671	....	41,096
Maintenance of equipment	387,520	653,285	....	265,765
Conducting transportation	1,368,954	1,387,343	....	18,389
General expenses	93,004	117,363	....	24,359
Taxes	41,235	40,882	353	....
Total	£2,137,288	£2,486,544	....	£349,256
Percentage of gross receipts	73.22	73.54	....	0.32
Expenditure per train mile	54.22d.	59.19d.	...	4 97d.

The train mileage of the half-year compares with that for the half-year ending June 30, 1907, as follows:

Description of mileage.	1908.	1907.	Increase.	Decrease.
Passenger	4,304,902	4,152,908	151,994	....
Freight	4,929,803	5,619,480	....	689,677
Mixed trains	226,051	309,425	....	83,374
Total	9,460,756	10,081,813	....	621,057

The gross receipts show a decrease of £462,067, or 13.67%; the working expenses, including taxes, a decrease of £349,256, or 14.05%; and the train mileage a decrease of £621,057, or 6.16%.

The total charges to capital account were £232,279 15s. 2d. Of this £111,061 7s. 6d. was discount and commission on 4% guaranteed stock issued during the half-year, less premium on 4% debenture stock sold and issued in exchange for Midland of Canada sectional bonds. The actual expenditure on capital account was:

New works	£ 29,288 6 2
Double track	88,826 13 10
Land purchased	3,103 7 8
Total	£121,218 7 8

No additions to rolling stock at the expense of capital have been made during the half-year. Three 10-wheeled passenger locomotives, and 28 first-class, 5 baggage, 50 tank, and 22 caboose cars were purchased, and 2 dining, 2 mail, 1 caboose and 1 scale test cars were built in the company's shops on revenue account.

The doubling of the track between St. Lambert at the east end of the Victoria Bridge and Ste. Rosalie, where the Intercolonial Ry. joins the G.T. line, has been somewhat delayed, but it will be completed and put into operation on Nov. 1.

The gross receipts of the Canada Atlantic Ry. for the half-year were £164,855, against £180,646 in 1907, and the working expenses were £171,644, against £206,343, leaving a revenue deficiency of £6,789 in 1908, compared with £25,697 in 1907. The interest charges were £62,103, against £62,103, so that there was a net revenue deficiency of £68,892, compared with £87,800 in 1907. The number of passengers carried was 220,616, against 211,020, an increase of 4.58%; and the passenger receipts, including mails and express receipts, were £42,313, against £43,567, a decrease of 2.88%. The quantity of freight moved was 941,363 tons, against 854,967, in 1907, an increase of 10.11%; and the receipts from freight traffic were £116,669, against £131,330, a decrease of 11.16%.

The gross receipts of the G.T. Western Ry. for the half-year were £513,739, against £599,033 in 1907, and the working expenses were £477,806, against £516,535, leaving a net profit of £35,933, compared with £82,498 in the corresponding half-year. The net revenue charges were £91,861, reduced by credits for rentals in Chicago to £38,779, so that there was a net revenue deficiency of £2,846, as compared with a surplus of £921 for the corresponding half-year of 1907. Deducting this deficiency from the surplus for the half-year ended Dec. 31, 1907, of £15,985 there remains a surplus for the year to June 30, 1908, of £13,139, and adding to this the balance of £6,728 carried forward June 30, 1907, the net revenue balance amounts to £19,867, which will admit of the payment of the full interest on the second mortgage income bonds, and leave a balance of £7,539. The number of passengers carried was 845,022, against 830,242, an increase of 1.78%, and the passenger train receipts, including mails and express receipts, were £169,893, against £158,018, an increase of 7.51%. The quantity of freight moved was 1,524,137 tons, against 1,852,607, a decrease of 17.73%, and the receipts from this traffic were £342,671, against £440,298 in 1907, a decrease of 22.17%.

The gross receipts of the Detroit, Grand Haven, and Milwaukee Ry. were £143,637, against £165,644 in 1907; the working expenses were £151,709, against £139,662, leaving a revenue deficiency of £8,072, against a surplus of £25,982, a decrease of £34,054, compared with the corresponding half-year of 1907. The net revenue charges were £38,502, against £36,952 in 1907, so that there was a net revenue deficiency of £46,574, as compared with £10,970 for the corresponding period of 1907. The number of passengers carried was 325,529, against 308,622, an increase of 5.48%; and the passenger receipts, including mails and express receipts, were £46,831, against £48,512, a decrease of 3.47%. The quantity of freight moved was 710,658 tons, against 774,835 in 1907, a decrease of 64,177 tons, or 8.28%; and the receipts from freight traffic were £91,427, against £113,978 in 1907, a decrease of £22,551, or 19.79%.

The first section of the G.T. Pacific Ry., covering the district between Winnipeg and Battle River, 675 miles, has been completed, and although not yet formally opened, is being operated by a mixed passenger freight train service for the accommodation of settlers and farmers. The grading of the track between Battle River and Edmonton is also completed, and when the bridges at Battle River and across the Saskatchewan River at Clover Bar, near Edmonton, are completed, which will be towards the end of Nov., the mixed train service will be extended through to Edmonton, a total distance of 793 miles. The grading of the line west of Edmonton to Wolf Creek, 123 miles, which is the dividing point between the prairie and mountain sections, is progressing favorably, as well as the grading of the section of about 100 miles eastward from Prince Rupert, the Pacific terminus of the railway. The Lake Superior branch will be completed by the end of Oct.

The Chief Engineer reports that the expenditure for maintenance of the company's property was $200,000 less than during the corresponding period of last year. The permanent way and works have been maintained in good condition.

The Superintendent of Motive Power reports the expenditure, mileage, etc., as follows:

Half-year ended.	Total expenditure.	Train mileage.	Rate of expenses per mile.		
			Train	Engine	Car.
			Cents	Cents	Cents
June, 1908 ..	$4,337,989	9,460,756	45.85	35.65	2.94
" 1907 ..	4,848,724	10,081,813	48.09	36.52	3.05

A decrease in expenditure of $510,735, or 10.5%, compared with a decrease in train miles of 621,057, or 6.2%.

	Passenger Trains.	Freight Trains	Mixed Trains.
The average number of cars moved per train was	4.3	25.8	6.6
And for the corresponding period	4.5	24.6	7.6

LIGHT

LOCOMOTIVES

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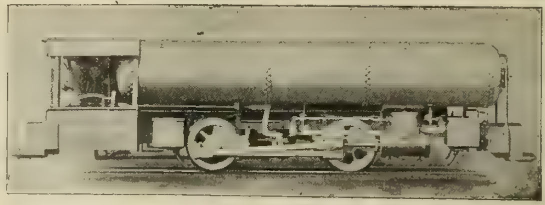

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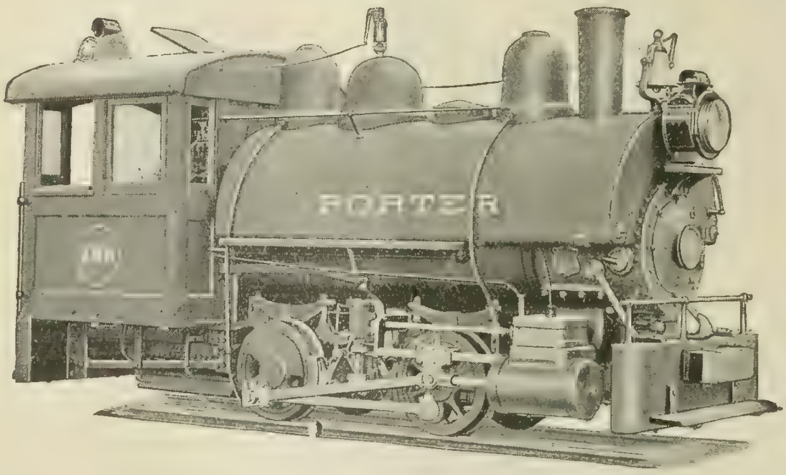

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SWITCHES and TRACK WORK
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SPRINGS
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MANGANESE STEEL CASTINGS
for wearing Parts, insuring Great Hardness and Durability

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TRUCKS FOR ELECTRIC CARS

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BARROW HÆMATITE STEEL CO., BARROW-IN-FURNESS, ENGLAND

Quotations for Tee Rails, Fish Plates, etc., promptly furnished. Catalogues sent on application.

During the half-year 5 locomotives were sold, and 2 were scrapped, leaving 68 old light capacity locomotives set aside to be scrapped. Of the locomotives sold 4 were purchased by the G.T. Pacific Ry. Three ten-wheel passenger locomotives were purchased and put into service during the half-year. The actual stock at June 30, 1908, was 838 locomotives, against the official figures, 803, being a surplus of 35.

The comparative cost of repairs per train, engine and car mile was:

Cost per mile.	Repairs and renewals of locomotives.		All repairing charges, including shop, machinery, tools, and marine equipment, etc.	
	1908.	1907.	1908.	1907.
	Cents.	Cents.	Cents.	Cents.
Train	7.85	11.57	11.12	15.74
Engine	6.11	9.54	8.65	11.95
Car	0.50	0.80	0.71	1.00

The Superintendent of Car Department reports expenditure, mileage, etc., as follows:

Half-year ended.	Total cost of repairs and renewals.	Total miles run by cars.			Cost per mile.	
		Passenger.	Freight.	Total.	Car.	Train.
					Cents.	Cents.
June, 1908.	$ 833,452	19 026,991	128,552,997	147,579,988	0.565	8.81
" 1907.	1,592,300	19,237,218	139,865,332	159,102,550	1.000	15.79

A decrease in expenditure of $758,848, or 47.6 %, with a decrease in car miles of 11,522,562, or 7.2 %.

RECEIPTS.

	£ s. d.	£ s. d.	£ s. d.
Passengers		848,486 2 5	
Less—			
International bridge tolls	733 0 8		
St. Clair tunnel tolls	6,249 19 4	6,983 0 0	841,503 2 5
Mails and express			136,583 11 9
Freight and live stock		1,939,637 14 6	
Less—			
Cartage, etc.	47,793 4 4		
International bridge tolls	13,538 19 2		
St. Clair tunnel tolls	23,897 3 3	85,229 6 9	1,854,408 7 9
Miscellaneous receipts, rents, tolls, etc.			86,697 0 3
			£2,919,192 2 2

EXPENDITURE

		£	s.	d.
Maintenance of way and structures	8.45%	246,575	6	10
Maintenance of equipment	13.27%	387,520	5	1
Conducting transportation	46.89%	1,368,954	5	3
General expenses	3.19%	93,003	7	8
Total working expenses	71.80%	2,096,053	4	10
Taxes	1.42%	41,234	8	5
	73.22%	2,137,287	13	3
Balance to net revenue account		781,904	8	11
		£2,919,192	2	2

The President, in comparing the ratio of expenses of the G.T.R. with other railways, said that such comparison would answer many of the complaints that had been made of extravagance in management, as it was considerably less than that of other roads. After some discussion the report was unanimously adopted.

Index to The Railway and Marine World.

A complete index to the matter contained in the Railway and Marine World for 1908, Jan. to Dec. both inclusive, is in course of preparation, and will be printed and ready for distribution early in Jan., 1909. The index for 1907, issued in Jan. last, met with much favor, and we have no doubt the one for the current year will be equally appreciated. A large portion of the matter we publish from month to month is of great permanent value for reference, and of course this value is much enhanced by a complete classified index. We were much gratified when we issued our index for 1907 to find that a large number of subscribers file and bind the paper.

It is not the intention to make a general distribution of the current year's index, but a copy will be sent to each subscriber who desires one, and who will notify us to that effect. A letter or post card, simply stating that the index is desired, and giving the subscriber's name and address, will be sufficient. Early application is requested, and subscribers who wish a copy are asked to write us at once. "Do it now." The number of copies to be printed will be governed by the number of applications received.

G.T.R. Subsidiary Companies.

The annual meetings of the various subsidiary companies were held on the dates and at the places mentioned below, the names of the directors and officers elected being also given:

Chicago, Detroit and Canada G.T. Junction Rd. Co.—Detroit, Oct 8.—President and General Manager, C. M. Hays; Vice-President, E. H. Fitzhugh; other directors, W. H. Biggar, K.C.; J. W. Loud, A. B. Atwater; Secretary, G. W. Alexander; Treasurer, F. Scott.

Detroit, Grand Haven and Milwaukee Ry. Co.—Detroit, Oct. 8.—President and General Manager, C. M. Hays; Vice-President, E. H. Fitzhugh; other directors, W. G. Brownlee, J. Hobson, J. W. Loud, J. Pridgeon, Jr., A. P. Sherrill, A. B. Atwater, F. W. Egan; Secretary-Treasurer, G. W. Alexander.

G.T. Western Ry. Co.—Detroit, Oct. 8.—President and General Manager, C. M. Hays; Vice-President, E. H. Fitzhugh; other directors, W. G. Brownlee, A. Dixon, A. W. Wright, L. R. Skinner, A. B. Atwater; Secretary-Treasurer, G. W. Alexander.

International Bridge Co. — Buffalo, N.Y., Oct. 9.—President and General Manager, C. M. Hays; Vice-President, E. H. Fitzhugh; other directors, H. W. Sprague, W. G. Brownlee, W. H. Biggar, K.C.; J. Hobson, J. W. Loud; Secretary, G. W. Alexander; Treasurer, F. Scott.

Michigan Air Line Ry.—Detroit, Oct. 8.—President and General Manager, C. M. Hays; Vice-President, E. H. Fitzhugh; other directors, W. H. Biggar, K.C.; J. W. Loud, A. B. Atwater; Secretary, G. W. Alexander; Treasurer, F. Scott.

Toledo, Saginaw and Muskegon Ry. Co.—Detroit, Oct. 8.—President and General Manager, C. M. Hays; Vice-President, E. H. Fitzhugh; other directors, A. B. Atwater, J. W. Loud, F. E. Ranney, C. W. Middleton, A. F. Temple; Secretary-Treasurer, G. W. Alexander.

C. P. R. Betterments, Construction, Etc.

Construction Programme.—In the course of an interview at Winnipeg, Oct. 14, Sir Thos. G. Shaughnessy, President, said: "The company has at present about 400 miles of track under construction, and we will be occupied for some time in completing these extensive contracts. This work will be pushed to completion and the new lines equipped with the necessary rolling stock at the earliest possible time."

In this connection the annual report of the company shows that there are 707.9 miles of line under construction, distributed as follows:

Eastern Division.—Extension of the Northern Colonization Ry. from Nominingue to Rapide de L'Orignal, Que., 35 miles.

Ontario Division.—Extension of Tillsonburg, Lake Erie and Pacific Ry., from Embro station to Embro village, six miles. Branch of Guelph and Goderich Ry. into Listowel, Ont., 16.1 miles. Line from Victoria Harbor to Coldwater, Ont., 13.3 miles, being the first section of the Georgian Bay and Seaboard Ry.

Central Division.—Extension of Stonewall branch northerly from Komarno to Iceland River, Man., 30 miles. Extension of Pheasant Hills branch from Nokomis, Sask., to Hardisty, Alta., 328.5 miles. Extension of Virden branch from Virden to McAuley, Man., 10 miles. Weyburn branch, Stoughton to Weyburn, Sask., 36.7 miles. Extentension of Manitoba and Northwestern Ry., Sheho to Lanigan, Sask., 82.8 miles.

Western Division.—Branch line from Moose Jaw, Sask., northwesterly, 107 miles. Branch line from Regina to Bulyea, Sask., 43 miles.

The mileages given in these figures include the whole extent of the branch lines or extensions contemplated, while the mileage mentioned by the President included only such distances as are actually under contract and upon which work is in progress.

Sherbrooke, Que.—Press reports state that the company has purchased 30 acres of land at Sherbrooke, Que., from the British America Land Co., and that it contemplates starting the erection of car shops, etc., there in the spring. In this event, the reports state that the present shops, etc., at Farnham, Que., would be closed, and all the divisional offices now there transferred to Sherbrooke. We are officially advised that nothing is known at headquarters respecting this report.

The Mile End Roundhouse, near Montreal, was destroyed by fire, Oct. 1, the damage being estimated at about $40,000.

Delorimier Stock Yards.—The new stock yards which the company has laid out at the corner of Mount Royal Ave. and Iberville St., Montreal, were opened for business Oct. 7. The yards cover an area of 23 acres, the whole of which is covered with concrete. The buildings are of wood, and equipped with all the latest devices for handling and sorting live stock. Accommodation is provided for 4,000 cattle, 5,000 sheep and calves, 4,000 pigs, and 60 horses. The laying out of the yards, after the land was acquired, is estimated to have cost $200,000.

Georgian Bay and Seaboard Ry.—The branch line from Coldwater Jct. to the town of Coldwater has been completed, and a regular train service inaugurated.

Lake Superior Division.—The roundhouse at Webbwood, Ont., was destroyed by fire recently, and two locomotives considerably damaged.

A trestle bridge at Missanabie, 310 miles west of North Bay, Ont., was burned Oct. 17, causing the tying up of traffic on the transcontinental line until a temporary structure was put up.

Fort William-Winnipeg Second Track.—Sir Thos. G. Shaughnessy, President, accompanied by a party of directors and officers,

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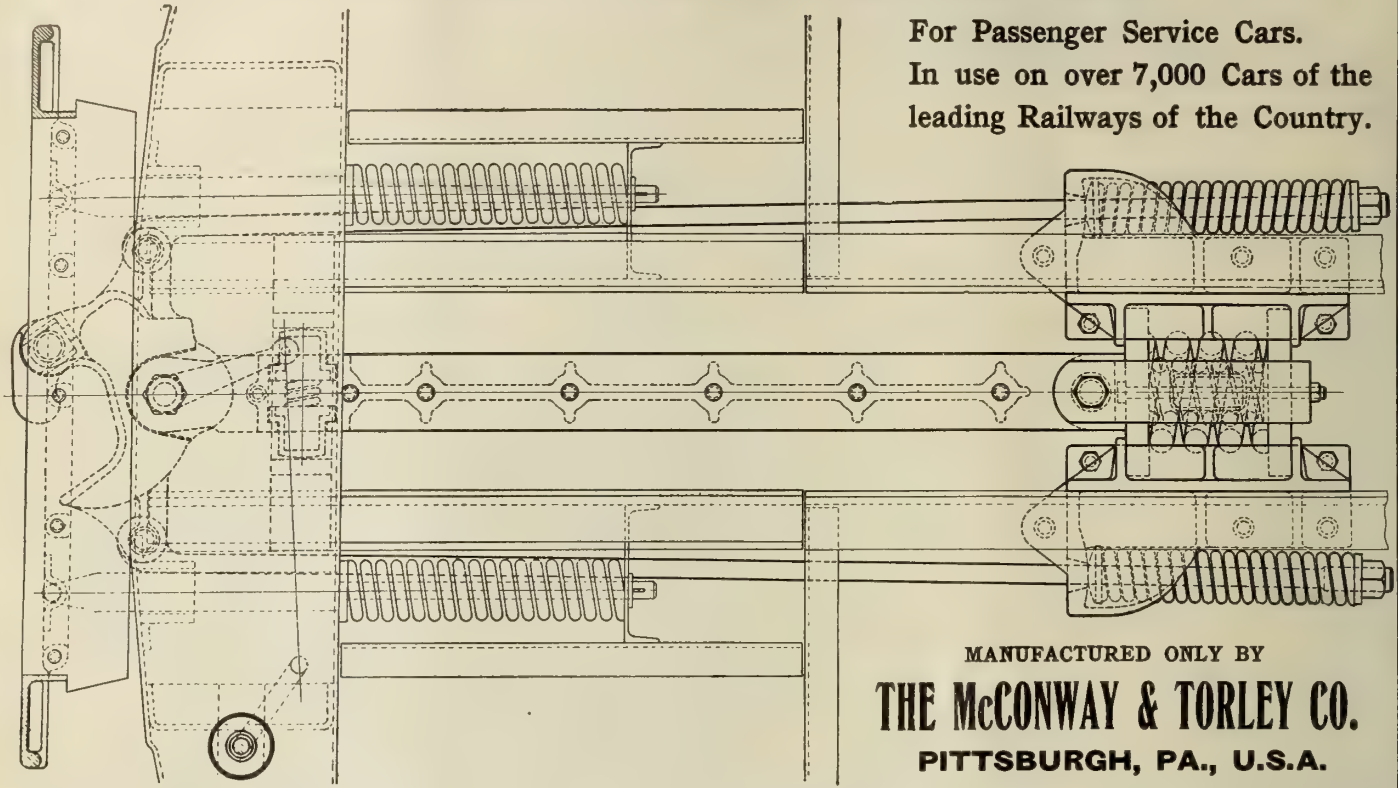

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arrived in Winnipeg by special train, Oct. 13. The train passed over the second track, upon the construction of which the company has been engaged for the past three years. In an interview Sir Thomas said: "With the exception of a stretch of about 16 miles, this second track is in use at present for the handling of the regular traffic. The building of this new track would have been a matter of very great difficulty in any case. What made it a matter of the greatest difficulty was the fact that during the entire period of construction, when so much rock blasting was done and operations of great magnitude were under way, the company's heavy traffic was forwarded every day. The difficult project was carried through with a minimum of interruption and without any serious hindrance to the company's business at any time. The country through which the road passes is one of unusual difficulty owing to muskegs and rocks, and through this there has been built a roadbed of a most substantial character."

Winnipeg to the Coast Second Track, Etc.—A press dispatch from Winnipeg, dated Oct. 16, said: "Sir Thos. G. Shaughnessy has announced the C.P.R.'s intention to double-track through from Winnipeg to the coast. The company also proposes to operate trains over the mountains by electricity generated by water power."

Weyburn-Stoughton Line.—A regular train service was put into effect Sept. 28.

Irrigation Works in Alberta.—J. S. Dennis, Assistant to the Second Vice-President, referring to the work of irrigation in Alberta, of which he has charge, recently said: "The construction of the irrigation canals progressed very favorably during the summer, and by the close of the season we shall have some 700 miles of irrigation canals and ditching carrying water from the Bow River for agricultural purposes. As a result these irrigation lands are now selling for $25 an acre, where formerly they were worth very little for ranching purposes."

Edmonton Northerly.—S. M. Maxwell, a prospector, on returning to his home in Edmonton, Sept. 24, said C.P.R. engineering parties had completed a survey for a projected line to Dunvegan, and the entire force was concentrating its efforts on a survey through to Pine Pass. From that point they expected to work through British Columbia to a point north of Prince Rupert. Other reports state that the C.P.R. is massing all its available construction outfits and material at convenient points to Edmonton, and that it is expected before spring opens that grading will be started on a line from Edmonton to the Peace River.

Crow's Nest Pass Line Diversion.—The contract for the concrete work on the bridge over the Old Man River, on the diversion of the line between Lethbridge and Macleod, Alta., has been let to T. Kelly & Sons, Winnipeg. The work is estimated to cost about $300,000. The bridge will have a total length of over 2,000 ft., and will be carried on 35 piers. The superstructure will rest directly on the piers, and not as is the case with the Belly River bridge, 17 miles away, be supported on steel structures, resting on concrete foundations, reaching only to the level of the water.

The grading on the cut-off is reported to be practically completed and the steel for laying the track has been delivered at Lethbridge.

Midway, Westerly and Northerly.—In connection with the signing of a subsidy contract with the Midway and Vernon Ry. Co. for the construction of a line from Midway to Vernon, B.C., it is reported that the C.P.R. and the Great Northern Ry., U.S., have entered into an agreement by which the two lines are to be connected at Midway. The M. and V. Ry. was a party to the difficulties as to routes which brought about a clash between the contractors at Midway about three years ago. R. A. Henderson has recently been making a survey over the Midway-Penticton route, and a party under H. E. Carry has been working all summer on a route between Nicola and Okanagan Lake, and according to reports received Oct. 12, was daily expected at Penticton, by way of Trout Creek.

Vancouver Station.—The erection of a large addition to the present C.P.R. station at Vancouver is under discussion, and it is stated that as soon as the local officials have completed plans, they will be sent to Montreal for the consideration of the President and the Board. The estimated cost of the projected alterations is $200,000. (Oct., pg. 707).

Vancouver Island.—Speaking at the Victoria Board of Trade's dinner to him, Oct. 22, Sir Thos. G. Shaughnessy said extension of lines on Vancouver Island would be pushed to Alberni and Cowichan and northward to Comox.

Through Rates to the Orient.

The C.P.R. has filed with the Interstate Commerce Commission at Washington, D.C., its preliminary through rate schedule on cotton piece goods between points in the United States and Oriental ports, the rates thus filed showing the proportionate charges for carrying across the continent to the seaboard, in accordance with the ruling of the Commission, delivered April 15, and which takes effect Nov. 1. There has been a general protest against this ruling by the U.S. railway companies concerned, and as the Interstate Commerce Commission has no jurisdiction over the ocean-carrying rates, the U.S. railway companies which are in competition with the C.P.R. for the trans-Pacific carrying trade, are reported to have decided to suspend their Oriental through rates on and after Nov. 1, and thenceforward to publish only the rates to seaboard ports. The U.S. companies maintain that the exigencies of domestic trade forbid their complying with the statute in its spirit, and that the expedient they have adopted is the only practical one, even though it may eventually prove disastrous. The C.P.R. believes that its best interests can be served by complying with the strict letter of the law.

E. V. Skinner, Assistant Traffic Manager C.P.R., New York City, in an interview on the subject, recently said:

"The C.P.R. is amenable to the Interstate Commerce Commission's rulings in so far as it does business within the U.S., for the opening clause of the Interstate Commerce Act specifies that it governs commerce from a point in the U.S. to a point in an adjacent country outside of the U.S. Even though the C.P.R. might not be amenable to such acts of the commission, it would, of course, be expedient for the company to comply with rulings made for other companies in this country. The recent ruling of the commission makes it incumbent upon all railways carrying through freight to a foreign port to publish the proportionate rate through U.S. territory. This rule is designed particularly to regulate Oriental trade. The C.P.R., intending to comply strictly with the rule, has registered with the Interstate Commerce Commission its through rate to Oriental ports on cotton piece goods, showing the proportionate rate through the U.S. to the seaboard. That rate is $1.25 per 100 lbs. from southern manufacturing points, as before, with 95c. inland, and 30c. ocean charge. We expect to publish shortly rates for a great many commodities for the Oriental and Australian trade, commodities manufactured in this country. In every instance we will continue the through rate at the same schedule as the rate to-day, there being no change, except that of publishing the land rate, as per the Commission's mandate. The C.P.R. believes that the interests of American trade in the Orient demand compliance with the Interstate Commerce Commission's law in every detail. The market for U.S. cotton piece goods in China and Japan is the biggest market the U.S. export trade has. We believe that if the carriers on this side of the water will not carry to Orient ports for a through rate of $1.25, the manufacturers of Manchester and Birmingham, who have little rail tariff and a great deal of cheap water rates, will carry to the Orient for that price, and will eventually have a monopoly on the entire market of China and Japan."

On the same subject an official of the Southern Pacific Rd. is reported to have said: "All of the U.S. transcontinental railways, which means the Southern Pacific, the Great Northern, Northern Pacific and Santa Fe, have decided that compliance with the Commission's ruling would be immediately disastrous. Naturally, if we should have to publish our proportionate rate to San Francisco on through consignments to Yokohama or Shanghai, the future domestic trade would suffer. We would have to carry to San Francisco on the same announced rate that we carried through San Francisco to China. There is no law in Canada forcing the C.P.R. to publish its domestic rates to Vancouver, whatever business it may do in the U.S. Another factor enters into this situation. If we publish our domestic rates to San Francisco and the other transcontinental lines publish only their rates to Portland, Los Angeles and Seattle, as we will all do after Nov. 1, the ocean rates thence remaining purely the business of such ocean carriers as may exist, the bulk of the U.S. trade to the Orient will inevitably be forced into the hands of Japanese subsidized lines and tramp steamers plying out of the Pacific ports. It stands to reason that these steamers can carry cheaper than the first-class passenger steamers running on the Pacific, the Pacific Mail Line for instance. The result of this law of the commission must inevitably be that the bulk of the foreign trade in China and throughout the East will be carried either in British bottoms through the Suez Canal, or in British bottoms to Canada, through Canada on a British railway, and thence to the Orient again in British bottoms. The small U.S. merchant marine on the Pacific cannot meet the competition of subsidized lines."

Railway Lands Patented.—Letters patent covering Dominion lands in Manitoba, Saskatchewan and Alberta, were issued to railways during June and July, as follows:

	Acres.
Alberta Ry. and Irrigation Co.'s sales	319.00
Calgary and Edmonton Ry	19,700.10
Canadian Northern Ry	2,335.84
C P.R. grants	416.82
" " Souris branch	627.59
G.T. Pacific Ry	9.24
Manitoba and Southeastern Ry	2,155.94
" Southwestern Col. Ry	54,698.51
Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co	320.00
	80,583.04

During July and Aug., 31 employes were killed and 44 injured in the course of their employment on Canadian railways. Of the fatalities, 14 were due to being run over, 5 to collisions, 4 to falls, 3 to machinery, 2 each to being caught between cars, and to derailments, and one to being struck by a passing object; of the non-fatal accidents, 9 were due to falls, 8 to being run over, 7 to being caught between cars, 4 each to derailments and to falling material, 3 each to collisions and to explosions, 2 each to machinery and to being struck by passing objects, 1 each to falling material and to escaping steam.

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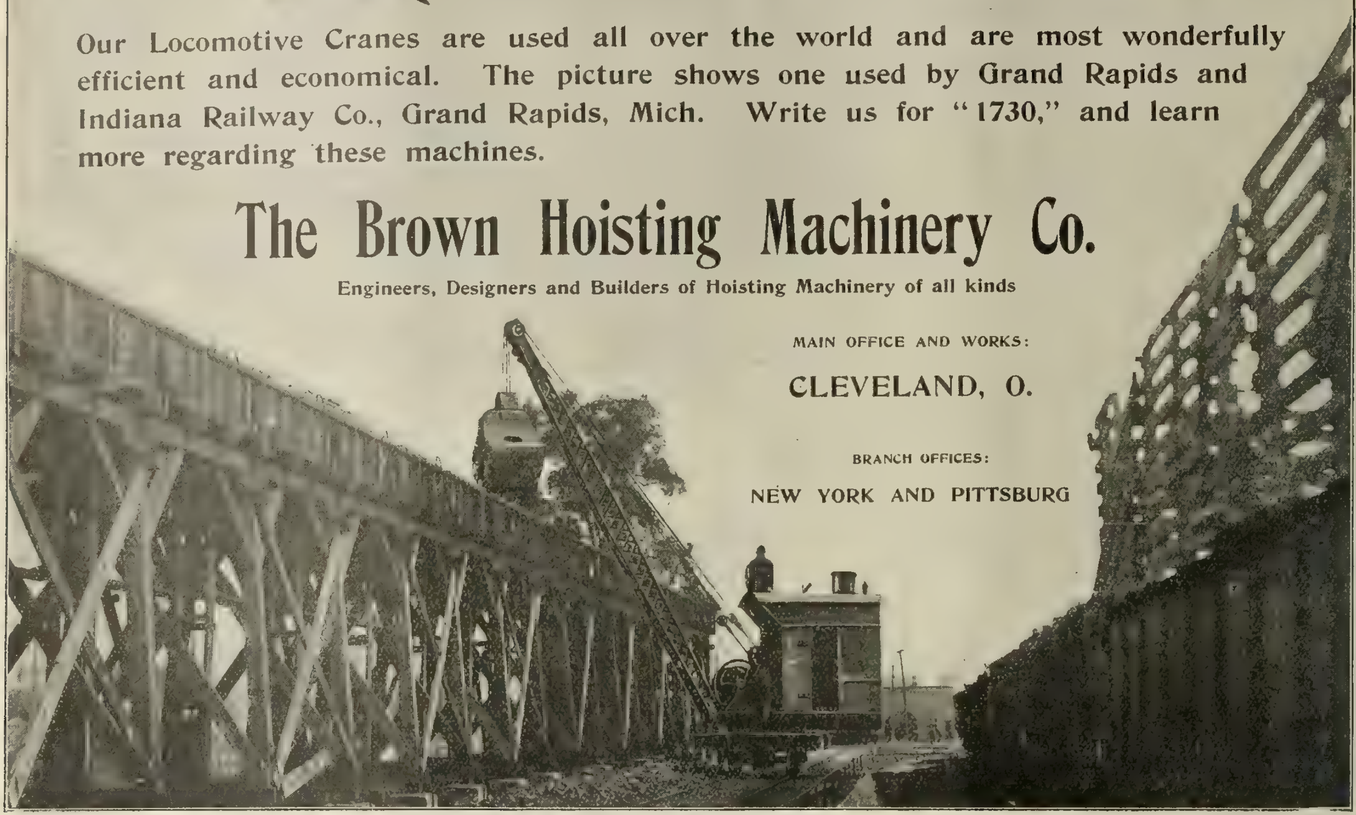

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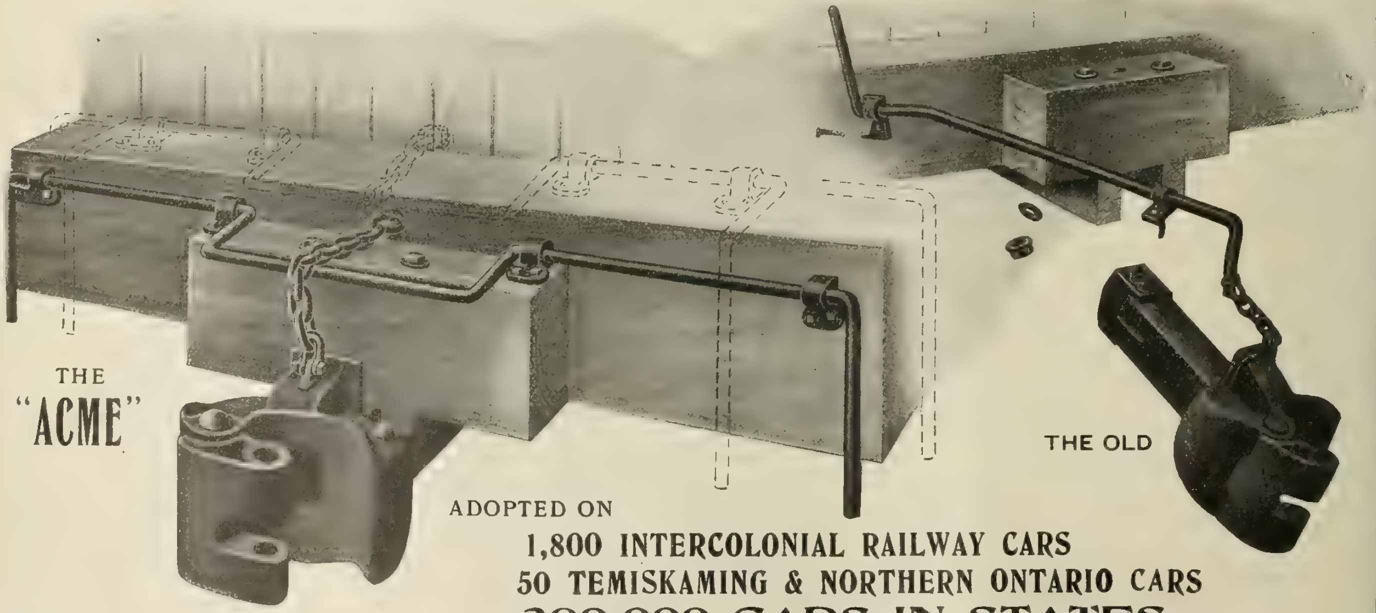

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Railway Commissioners' Traffic Orders.

5153. Sept. 18.—In the matter of the application of the Winnipeg Board of Trade, the Winnipeg Jobbers' and Shippers' Association, and the Deloraine Board of Trade, under sec. 323 of the Railway Act, for an order disallowing the tariffs of freight rates issued by Canadian Pacific and Canadian Northern Railway Companies, in substitution for the Traders' tariffs, so-called, declared illegal by the Board as preferential and discriminatory in favor of Winnipeg: Upon the hearing of counsel for applicants and the railway companies, the evidence adduced, and what was alleged, the cities of Regina and Portage la Prairie being represented at the hearing. It is ordered that the said application be, and it is hereby, dismissed. And it is further ordered that the question of special commodity rates from Winnipeg, also the adoption of a modification of the Ontario "town" tariffs, prescribed in order 3258, dated July 6, 1907 (schedule A), as a basis for special "town" tariffs applicable to the Western Provinces, as suggested at the hearing, be reserved for future consideration.

RATE ON CALIFORNIA ORANGES.

5385. Sept. 15.—In the matter of the complaint of Stockton & Mallinson, Ltd., wholesale fruit and produce merchants, Regina, Sask., alleging that the rate charged by the C.P.R. Co. on shipments of oranges from California to Regina, is unreasonable and discriminative compared with the rate charged from California to points in Manitoba and Ontario. No one appearing at the hearing for the complainants, it is ordered that the said complaint be dismissed.

RATE ON CANNED VEGETABLES.

5387. Sept. 1.—In the matter of the complaint of the Canadian Canners, Limited, complaining against a rate of 40c. per 100 lbs. charged on a carload of canned vegetables from Trenton, Ont., to Englehart, Ont., shipped on the Temiskaming and Northern Ontario Ry. via the Central Ontario Ry. to Central Ontario Jct., thence via C.P.R. to North Bay, for delivery to the T. and N.O. Ry. The said complaint having been set down for hearing and no one having appeared for the complainant, it is ordered that the said complaint be dismissed.

RATES ON ONTARIO STONE.

5389. July 29.—In the matter of the application of Doolittle & Wilcox, of Dundas; J. R. Murray, of Terra Cotta; W. Webster, of Inglewood; T. Foster, of Cheltenham; Mr. Cummings, of Terra Cotta; Mr. Fleming, of Glen Williams; H. Logan, of Glen Williams; W. Logan, of Glen Williams; T. McBride, of Terra Cotta; R. Carl, of Credit Forks; J. Webb, of Inglewood; J. Maloney, of Schaw; and D. Robertson, of Milton, stone quarry operators in Ontario, under sec. 523 of the Railway Act, for an order disallowing the proposed increase in freight rates for the carriage of stone upon the C.P.R. and the G.T.R. Upon the hearing of counsel for applicants and the railway companies, the evidence adduced, and what was alleged, and upon the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the said application be dismissed. And it is further ordered that the stone rates of the said railway companies from Guelph, Galt, Niagara Falls, Longford, St. Mary's, and Ivanhoe, to Toronto and common points, do not exceed the rates from other quarry points of similar or greater distances; and that the present scale of rates be amended accordingly.

Chief Commissioner Mabee delivered the following judgment in this case: This application is made by a number of stone quarry operators for an order, under sec. 323 of the Railway Act, disallowing the proposed increase in freight rates for the carriage of stone upon the G.T.R. and C.P.R. The increase was 5c. per ton within certain areas. The case, however, upon the hearing, was much enlarged and assumed the feature of not being a serious attack upon the proposed 5c. increase, but rather more a proposition submitted for the establishment of entirely new rates upon a mileage basis. The applicants represent quarries in operation at some eight points, all within 50 miles of Toronto, the principal market. The applicants are not unanimous in their views; and one of them has communicated to the Board his satisfaction with the 5c. increase, provided the rates are not reduced from individual quarry points.

I do not think the attack upon the 5c. increase has been successful. The stone rates to Toronto have always been low; and I am constrained to think that the case would not have been given the attention it has received, had it not been with the hope of persuading the Board to adopt a mileage basis for stone rates. It is apparent that the quarries located at greater distances from Toronto than the applicants are vitally interested in this matter, as upon this low grade material, with competition keen and prices cut, any disturbance in rates might, and doubtless would, work to the irreparable injury of many interests which have had no notice of this application and no opportunity of being heard. So, had I formed the opinion that it was the duty of the Board to adopt in whole or in part of the basis of rates argued for by the applicants, I should have directed these other interests to be notified and given an opportunity to present their views before disturbing the existing order of things. The fundamental ground of the application is to have mileage form the sole basis in making these rates. To those who have not had experience in rate-making the argument that distance must be the principal factor, appeals with force; but the history of these cases shows that, while it is of course to be considered, yet in many instances it is a minor matter; and I am not aware that either in England or the United States it has been held by the rate-controlling tribunals that they are bound to regard mileage as a controlling factor. If the argument of Doolittle & Wilcox were acceded to, it would have the effect of destroying large industries where proprietors have in good faith invested their money and built up a business connection, and turning over to those quarries in the short haul zone the control of the Toronto market. Of course, no such destruction of capital and consequent hardship upon innocent persons can be permitted, if any other course is open. There are many reported cases in which the Interstate Commerce Commission had paid little or no attention to distance of haul; and the business interests and demands of this country are much the same as there.

The proposal submitted and elaborated in evidence by Mr. Doolittle was ingenious and displayed much industry and care in preparation. The plan suggested was that for the first 40 miles the rate be ½c. per ton per mile, plus 25c. per ton terminal charges; from 41 to 70 miles, ½c. per ton per mile, plus 20c. per ton terminal charges; and above 70 miles, ¼c. per ton is added to the 70-mile rate. Now, the rate of ½c. per ton per mile for short hauls is admitted by Mr. Doolittle to be the lowest stone rate; and this applied to the longest haul is his basis. The objection to his terminal charge is that terminal cost varies; and he provides for this cost only at delivery points and not at the quarries. There is nothing that requires this Board to compel the carriers to frame their rates upon a basis of the kind proposed; and when it appears that the adoption of such a rate basis would work destruction to many existing industries, enure very largely to the benefit of the applicants, or some of them, and probably in no way reduce the price of stone to the consumer—possibly increase it—I am unable to see why the application should succeed. Comparison with rates upon other low grade commodities was made; but when each instance was investigated, reasons for differences appeared. The reason for low rates upon clay from Waterdown to Hamilton and other points, and upon marl, iron ore, and the like, is that these rates are based upon the reshipment by rail of the finished products of these raw materials. Low coal rates, of course, result from the competition of water carriers.

It strikes one as not unreasonable that the quarry near Toronto should enjoy the benefit of its natural location; but the nearby quarries have submitted for years to the establishment of these artificial rates by the companies, and without complaint have seen their outside competitors invest their capital and develop their industries, and it could hardly be regarded as fair that the short haul quarry proprietors should now, through the instrumentality of this Board, be enabled entirely to destroy their more distant brethren.

The Chief Traffic Officer has made some revision in the scale of rates from shipping points; and, as revised by him, the following will be the shipping points, distances, and rates:

From	Miles.	Rates in cents per ton.
Cooksville	12	45
Georgetown	27	55
Glen Williams	30	55
Milton	30	55
Terra Cotta	33	55
Campbellville	36	55
Cheltenham	35	55
Inglewood	38	55
Dundas	42	55
Schaw	43	55
Credit Forks	43	55
Cataract	46	55
Orangeville	46	55
Guelph	47	55
Alton	49	55
Galt	55	55
Elora	61	55
Fergus	64	55
Shelburne	62	60
Hagersville	67	60
Kirkfield	73	60
Cameron	74	60
Niagara Falls	77	60
Fells	86	60
Burnt River	91	60
Longford	92	60
St. Marys	97	60
Owen Sound	119	60
Ivanhoe	120	60
Crookston	133	65

SWITCHING ON CANADA ATLANTIC RY.

5390. Aug. 13.—In the matter of the application of A. Pilon, of Casselman, Ont., under sec. 226, of the Railway Act, for an order fixing the additional sum to be charged by the Canada Atlantic Ry., under par. 9 of the Board's order of Dec. 19, 1907, for switching and handling traffic to and from the siding mentioned in that order. Upon the hearing of counsel for applicant and the G.T.R., the evidence adduced, and what was alleged, and upon the report of the Chief Traffic Officer of the Board, it is ordered that the said application be dismissed. And it is further ordered that the additional charge of $3 a car for switching and handling traffic at the said siding, between Casselman and South Indian, complained against by the applicant, be declared to be a reasonable charge.

C.P.R. DEMURRAGE CHARGES.

5391. Sept. 14.—In the matter of the complaint of the Independent Lumber Company, Ltd., of Regina, Sask., alleging that the C.P.R. has made certain charges for demurrage on car service on shipments made by the complainant company at various points on the railway company's line in contravention of the rules governing such charges, as approved and authorized by the Board. Whereas in pursuance of the Board's order 4012, dated Nov. 27, 1907, the Operating Assistant to the Chief Traffic Officer of the Board held an investigation into the subject matter of this complaint at Regina, and reported his conclusions to the Board, with a copy of

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THE ELECTRIC HEADLIGHT

The following letter was received under date of May 8, 1908, from Mr. J. W. Cleary, Travelling Engineer Pyle-National Electric Headlight Co.:

"I learn from ________ the Master Mechanic here, that an engineer running between ________ and ________ discovered a broken rail with the Pyle-National Electric Headlight and made the stop without ditching his train. One or two pairs of wheels got off, but that was a small affair to what it would have been where a foot of the rail was broken off. Also an engineer running east of here found some cars shoved out on the main line. He saw them with the 'Electric' and made the stop without hitting them."

PYLE-NATIONAL ELECTRIC HEADLIGHT CO.

MONADNOCK, CHICAGO

the evidence taken at the said investigation. Upon the said report and the hearing of counsel for the railway company and the Canadian Car Service Bureau, it is ordered that the demurrage charged by the C.P.R. in respect of unloading of car 56928, at Craik, Sask., and that charged by the C.P.R. in respect of unloading of cars 29401 and 56512, at Regina, Sask., be forthwith refunded to the complainant company.

HAULING OATS AT WINNIPEG.

5395. Sept. 14.—In the matter of the complaint of the Northern Elevator Co., of Winnipeg, against the rate charged by the C.P.R. for hauling feed oats from the complainant's elevator at Winnipeg to the railway company's team tracks. Upon hearing the complainant and counsel for the railway company, the evidence adduced, and what was alleged; and upon the report of its Chief Traffic Officer, it is ordered that the complaint be dismissed.

G.T.R. REFUNDS ON LUMBER.

5411. Oct. 9.—In the matter of the application of J. G. Cane & Co., of Toronto, complaining against the rate of 9c. per 100 lbs. charged by the G.T.R. on shipments of lumber made by the applicants over the G.T.R. from Wiarton, Ont., to Toronto, during May, 1908, and applying for an order authorizing the G.T.R. to refund to the applicants 1c. per 100 lbs. on said shipments. Upon reading what was alleged in support of the application, and upon the report of the Chief Traffic Officer of the Board, and the consent of the G.T.R., it is ordered that the G.T.R. be authorized to refund to the applicants 1c. per 100 lbs. on the said shipments. And it is further ordered that the G.T.R. be authorized to refund to other shippers of lumber or other forest products, if any, from Wiarton to Toronto, or Toronto terminals, during May, 1908, all amounts collected on their shipments in excess of the rate of 8c. per 100 lbs., which the G.T.R. put into force between the said points on June 1, 1908.

FREE TRANSPORTATION BY EXPRESS.

5419. Oct. 9.—In the matter of the application of the Canadian Express Co., under secs. 340 and 341 of the Railway Act, for authority to carry for 90 days, free of charge, a publication known as The Flag, published in Great Britain, for the purpose of aiding in the extension of the Union Jack Club, organized for the benefit of sailors and soldiers. Upon reading what has been alleged in support of the application, it is ordered that the applicant be authorized to carry the said publication, free of charge, for 90 days from the date of this order.

A Railway to Hudson Bay.

The Dominion Government has five engineering parties in the field making surveys in connection with the projected railway to Hudson Bay. The centre of operations will be at Split Lake on the Nelson River, 260 miles from Norway House and 160 miles from Fort Churchill. Two parties will work northerly, three of them along the Churchill River, and one along the Nelson River to the Bay. The two other parties are working from the Pas Mission towards Split Lake, and are under the charge of Messrs. Murphy and Law. The three parties working northerly from Split Lake are in charge of Messrs. Ord, Gleeson and W. J. Gifford. E. H. Drury will be in charge of the depot at Split Lake, and the whole work is under the direction of J. H. Armstrong, with headquarters at Winnipeg.

Lieut.-Col. T. T. Turnbull, who recently returned to Winnipeg from a trip through the country in the vicinity of Fort Churchill, said he was convinced that Fort Churchill was bound to be a great factor in the shipping trade of Canada. There was a splendid future ahead of the country through which a railway to the bay would pass. What was really wanted was a two or four track line capable of being fed by all of the existing railways which run through the wheat belt of the west, not only in Canada, but in the Western States. Such a line would handle a vast amount of traffic from Washington, Montana, Wyoming, Nebraska, Oregon, the Dakotas, Iowa, and some from a state as remote as Wisconsin. Cereals and cattle could be handled cheaper over such a line than at present by any known route. As an imperial highway, the proposed line was very important, as it could handle troops to and from the Orient quicker than any existing route. There are also numerous water powers along the proposed route which could be developed for industrial purposes.

A report from Major Moodie, of the Northwest Mounted Police, as to the movement of ice in the bay, says: "A channel broke through the ice in Churchill harbor on the night of June 15, and next day the harbor was practically free of ice at low water. Both in the bay and in the river, the ice is loose and in needles, and a good steamer would have no difficulty in working through. (Oct., pg. 717).

Luncheon to Sir Thos. G. Shaughnessy.

The President of the C.P.R., while on his annual tour of inspection over the system, was entertained to luncheon at Winnipeg, Oct. 14, by the officials of the C.P.R. Western Lines and their chief assistants. Wm. Whyte, Second Vice-President, occupied the chair. Sir Thomas, in replying to the Chairman's welcome, said:

"I think we can truthfully say now that we are connected with the greatest transportation company that the world ever knew. We were credited with that position some time ago, but it is only within recent years, with the new developments and expansions, that probably we are entirely justified in asserting our position. I am very much gratified, indeed, to have this opportunity of meeting so many of the officers and their chief assistants connected with the western lines of the company, now a very important, if not the most important, section of the company's system —glad to meet them as the men who, by their loyalty, their zeal and their devotion—to which Mr. Whyte has referred—have assisted in bringing the company to its present position. Those of us who were connected with the enterprise in its early days know what a struggle it was to keep its head above water on account of our line running through so much unproductive country, a public sentiment not always friendly, and a section of the press always ready to arouse opposition, making it most difficult at times to secure money for needed improvements and additions to the property. The struggle was a serious one, but we have passed through all that and we are to-day in a strong position in every respect. This I have no hesitation in attributing to the excellent service of the officers and men who have been connected with the company during the past years and who have always taken an honest pride in that connection.

"It may not be uninteresting, as we are all members of the same family, if I remind you of what we have been doing in recent years. Since 1901, that is, in seven years, we have spent $125,000,000 in additions to our system, in equipment, in double tracks, improvements to grades, steamship lines, and a thousand and one other works of that description—a vast sum of money—an amount equivalent to the entire capital of the company in stock and bonds previous to that date. Our traffic, however, has grown from $31,000,000 or $32,000,000 to $72,000,000 last year, and with your assistance we hope to make it $80,000,000 or $85,000,000 in another year. With this growth of business, and the growth of importance of the company, there has necessarily been an increase in the staff, east and west, and I believe that I am justified in saying from what I see before me to-day, that the addition to the staff, in so far as it is represented by those sitting before me at this table, is most complimentary to the officers who were responsible for the selection.

"Mr. Whyte suggested that I might say something as to the elements and factors that contribute to success in railway life, as well as in other walks of life. Probably no person at the table started with less assurance of progress than I did myself. No doubt a great part of such success that has come to me has been in a measure accidental—due to circumstances, but I have seen enough of life and know enough of the manner in which the employer analyzes and estimates his assistants to say that the basis of all success, whether it be in railway life or in commercial life, or, indeed, in professional life, is not so much in the nature of genius, as in earnestness, industry, rational ambition, and, above all things, integrity. The principal officers of the company who are seated around me here know that in our affairs the effort is not to find suitable places for the good men, but for the company to find the requisite number of good men to fill the places that are available. I have not a doubt that amongst us here to-day there are at least half-a-dozen men quite as competent as I am to be President of the C.P.R., but they have not had the opportunity of coming to the front. They may be to blame themselves—as a rule they are to blame—but opportunity will come later, I hope, when they will develop, and as in the course of a few years it may be not only desirable, but necessary, in the interests of the company, and in fairness to ourselves, that those of us who are at the head of affairs now should surrender our duties to the younger and perhaps abler men. I hope it will be the lot of some of you to be in line of succession and to succeed.

"Our enterprise differs very substantially from the ordinary railway enterprises of this and of other countries, because the railway work is, while the most important by all means, only one branch of our work. We have our steamship services, our telegraph service, our hotel service, some mining enterprises, and the express business, which is a sort of collateral affair. We have all these requiring good men, not only at the head, but all the way down the official line, and as we increase in size, as our revenues become larger year by year, the number of men required in these capacities will necessarily increase. I can only repeat my hope that you here will be equal to the occasion, and that when the time comes, Mr. Whyte and the rest of us here will have no difficulty in designating the men who can with safety be entrusted with the affairs of this enormous corporation. I do not know that I can say anything more, beyond repeating my gratification that I have had this opportunity of meeting you, and expressing the earnest hope that everyone present will be eminently successful, happy and prosperous."

The Corbin Coal and Coke Co. has been registered at Victoria, B.C., under the British Columbia laws respecting extra-provincial companies. Its capital is declared to be $1,000,000. Its head office in Canada, Cranbrook, and its attorney, J. A. Harvey. The only limitations to the company's powers are with respect to the construction and working of railways. For this purpose those interested in the company secured a special act from the B.C. Legislature, and under it the Eastern British Columbia Ry. is being constructed.

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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

5313. May 7. Ordering the C.P.R. to protect by watchman its crossing at Aylmer St., Peterboro, Ont., between 6 a.m. and 7 p.m. daily, and apportioning cost of such protection.

5327. Sept. 22. — Authorizing Wallace Municipality, Man., to erect wires across C.N.R. near Virden.

5328. Sept. 22.—Authorizing J. T. Bell to lay a water pipe across G.T.R. in Morris tp., Ont.

5329. Sept. 22.—Authorizing C.P.R. to construct spur line to W. Talbot's premises, Outremont, Que.

5330. Sept. 22.—Approving of deviation of G.T.R. sidings to the Dominion Sewer Pipe Co.'s premises, Swansea, Ont.

5331. Sept. 22.—Authorizing the C.P.R. to operate interlocking plant where the Molson cut-off joins old main line at Molson, Man.

5332. Sept. 22.—Authorizing G.T.R. to construct a spur line to the Globe-Wernicke Co.'s premises, Stratford, Ont.

5333. Sept. 22.—Authorizing G.T.R. to construct additional track across two road allowances in Huron tp., Ont.

5334. Sept. 22.—Authorizing C.P.R. to construct spur line to A. L. Langman's premises, Calgary, Alta.

5335. Sept. 22.—Authorizing C.P.R. to construct spur lines at Enderby, B.C.

5336. Sept. 22.—Authorizing C.P.R. to construct bridges at second crossing of Kicking Horse River, on its Field diversion; first crossing of Kicking Horse River, on its Field diversion, and at mileage 52.44, Chapleau section.

5337. Sept. 22.—Authorizing C.P.R. to construct bridge at mileage 144.4, Cranbrook section.

5338. Sept. 22.—Authorizing G.T.R. to construct spur lines to the Massey-Harris Co.'s premises, Brantford, Ont.

5339. Sept. 22.—Authorizing British Columbia Telephone Co. to erect wires across C.P.R. at mileage 100.3, Cascade section, B.C.

5340 to 5342. Sept. 22.—Authorizing Manitoba Government Telephone Commission to erect its wires across C.P.R. at Pilot Mound, Montcalm St., St. Boniface, and 1¾ miles west of Thornhill, Man.

5343. Sept. 22.—Authorizing Bell Telephone Co. to erect wires across C.P.R. at Yonge and Cottingham Sts., Toronto.

5344. Sept. 22. Authorizing the G.T.P.R. to operate trains over crossing where its lines cross the C.P.R. Pheasant Hills branch, sec. 27-29-22 W. 2nd M., Sask.

5345. Sept. 22.—Authorizing Sarnia Electric Ry. to put into operation interlocking plant where the S.E.R. crosses the G.T.R.

5346. Sept. 23.—Authorizing A. A. Granger to lay a water pipe under C.P.R. at L'Epiphanie, Que.

5347. Sept. 23.—Authorizing Maidstone municipality to erect wires across M.C. Rd. near Essex station, Ont.

5348. Sept. 23.—Authorizing City of Hamilton to lay water pipe under G.T.R. where Liberty St. crosses same, between Hunter and Yonge Sts., Hamilton, Ont.

5349 to 5351. Sept. 22.—Authorizing Maidstone municipality to erect wires across M.C. Rd. at three places near Woodslee station, Ont.

5352. Sept. 25.—Authorizing Burford Electric Light Co. to erect its wires across G.T.R. at Maple Avenue, Burford, Ont.

5353. Sept. 14.—Ordering C.N.R. to fence right-of-way between Canora and Tiny, Sask., and that the work be completed before Dec. 1, 1908, on application of J. Jastrenski, who complained that certain of his cattle had been killed on the C.N.R.

5354. Sept. 29.—Authorizing C.P.R. to construct additional track across public highway at Rolling Dam, N.B.

5355. Sept. 29.—Authorizing Noisy River Telephone Co. to place wires across G.T.R. at Creemore, Ont.

5356 to 5358. Sept. 29.—Authorizing Bell Telephone Co. to place wires across C.P.R. at Bury Station, Que.; William St., Chatham, Ont.; and ¾ mile south of Mt. Tremblant station, Que.

5359. Sept. 29.—Authorizing Malahide and Bayham Telephone Co-operative Association to place wires across G.T.R. in Bayham and Middleton townships, Ont.

5360. June 2.—Directing G.T.P.R. to lay its tracks across the Winnipeg Electric St. Ry. on Pembina highway, Winnipeg.

5361. Oct. 1.—Approving revised location of G.T.P.R. from east line of sec. 7, tp. 53, r. 4, to sec. 14, tp. 53, r. 6, west of 5th mer., Alberta.

5362. Sept. 30.—Authorizing G.T.P. Telegraph Co. to place wires across C.N.R. at Earl (Nutana), Sask.

5363. Sept. 30.—Authorizing Manitoba Government Telephone Commission to place wires across C.N.R. near Fairview, Man.

5364. Sept. 18.—Authorizing C.P.R. Co. to carry freight traffic over its Moose Jaw branch, from mileage 14.5 to 63, subject to condition that speed of trains does not exceed 15 miles per hour.

5365. Sept. 14.—Authorizing G.T.P.R. to connect its tracks temporarily with the C.N.R. at Scotland Ave., St. Boniface, Man.

5366. Oct. 1.—Authorizing Carnduff Telephone and Electric Co. to place wires across C.P.R. at Carnduff, Sask.

5367. Oct. 1.—Authorizing Manitoba Government Telephone Commission to place wires across C.N.R. two miles west of Wawanesa, Man.

5368. Sept. 14.—Authorizing G.T.P.R. to connect its main line with C.P.R. main line at Oak Point Jct., Man.

5369. Oct. 1.—Authorizing W. J. Connon, Elora, Ont., to lay a water pipe across G.T.R. in Nichol tp., Ont.

5370. Aug. 7.—Authorizing Department of Railways and Canals to place I.C.R. telegraph and semaphore wires across G.T.R. at Aston Jct., Que.

5371. Sept. 17.—Authorizing Macdonald College to lay water pipe across G.T.R. at Ste. Anne de Bellevue, Que.

5372. Oct. 2.—Authorizing proposed deviation in location of main line of G.T.R. already constructed in Caledonia, Ont.

5373. Oct. 6.—Authorizing City of Toronto to lay water pipes under G.T.R. tracks on the Esplanade, Toronto.

5374. Oct. 6.—Authorizing Mrs. M. A. Roy, Montreal, proprietor of St. John's waterworks, to lay a main under the G.T.R. at St. John's, Que.

5375. Oct. 6.—Authorizing City of Toronto to construct a brick sewer under G.T.R. at Greenwood Ave., Toronto.

5376. Oct. 6.—Authorizing Transcontinental Ry. Commission to cross with its tracks the C.P.R. at grade near St. Basile station, Que.

5377. Oct. 6.—Approving location of proposed station of Q.M. & S. Ry. station at Nicolet, Que.

5378-5379. Oct. 6.—Authorizing the British Columbia Telephone Co. to erect wires across C.P.R. at Clayburn and Abbotsford, B.C.

5380. Oct. 6.—Authorizing C.P.R. to construct a spur to the Rock Creek Lumber Co.'s premises, near Mayook, B.C.

5382. Oct. 7.—Authorizing Morris tp., Ont., to lay a tile drain across the G.T.R.

5381, 5383. Oct. 7.—Authorizing Wheatley Telephone Co. to erect wires across P.M. Rd. in Romney tp., Ont.

5384. Oct. 6.—Authorizing C.P.R. to construct spur line to the Peel Lumber Co.'s premises, Peel parish, Carleton county, N.B.

5385. Sept. 15.—Dismissing complaint of Stockton & Mallinson, Ltd., Regina, Sask., re alleged unreasonable rates charged on oranges from California, U.S.A. (See pg. 785.)

5386. Oct. 6.—Authorizing British Columbia Telephone Co. to erect wires across C.P.R. at Clayburn station, B.C.

5387. Sept. 1.—Dismissing complaint of Canadian Canners, Ltd., against rate charged on canned vegetables from Trenton to Englehart, Ont. (See pg. 785.)

5388. Oct. 6.—Authorizing British Columbia Telephone Co to erect wires across C.P.R. at Mission Jct., B.C.

5389. July 29.—Dismissing application of stone quarry operators in Ontario, for an order disallowing proposed increase in freight rates for the carriage of stone on the C.P.R. and G.T.R. (See pg. 785.)

5390. Aug. 13.—Dismissing application of A. Pilon, of Casselman, Ont., for order fixing additional sum to be charged by C.A.R. for switching. (See pg. 785.)

5391. Sept. 14.—Ordering C.P.R. to refund to Independent Lumber Co., Regina, Sask., demurrage charges. (See pg. 785)

5392. Oct. 6.—Ordering J. H. Cockburn to construct and maintain a culvert under C.N.O.R. to carry off water at Lily Lake, near Lake Joseph station, Ont.

5394. Sept. 15.—Ordering C.P.R. to construct a spur track or transfer track from its line at Holmfield, Man., to the C.N.R.

5395. Sept. 14.—Dismissing complaint of Northern Elevator Co. complaining against rates charged by C.P.R. for hauling feed oats from elevator at Winnipeg to tracks. (See pg. 787.)

5396. Oct. 7.—Authorizing the Brantford and Hamilton Electric Ry. to temporarily operate its crossing with G.T.R. in Brantford, Ont.

5397. June 23.—Ordering the County of Carleton to be joined in application of City of Ottawa and directing the C.A.R., the St. Lawrence and Ottawa Ry. and the Montreal and Ottawa Ry. to carry the Richmond Road, Ottawa, under the railways by means of a viaduct, and to make such change in the location of the portions of the railways as may facilitate the construction of such work.

5398. Oct. 6.—Approving agreement of City of St. Thomas, municipality of Yarmouth, and the M.C. Rd., ordering that Ross St. be diverted by being widened and carried under the M.C. Rd. by means of a subway, also that First Ave. be diverted and widened and a new subway constructed immediately to the west of the present subway.

5399. Oct. 6.—Authorizing Corporation of Campbellford, Ont., to erect electric light wires across the G.T.R.

5400. Oct. 6.—Authorizing United Gas Co., St. Catharines, Ont., to lay mains under G.T.R. at certain points in Welland and Haldimand counties, Ont.

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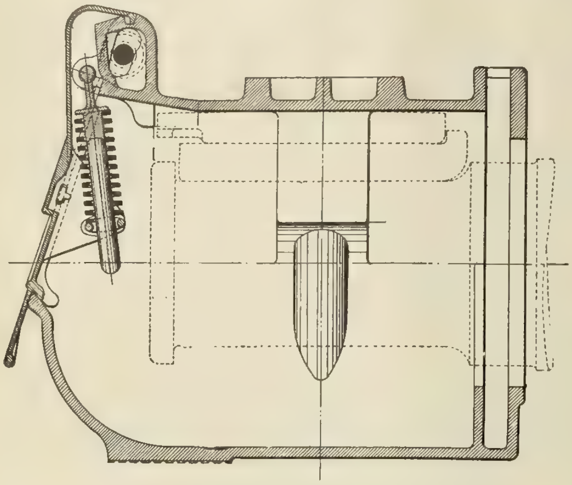

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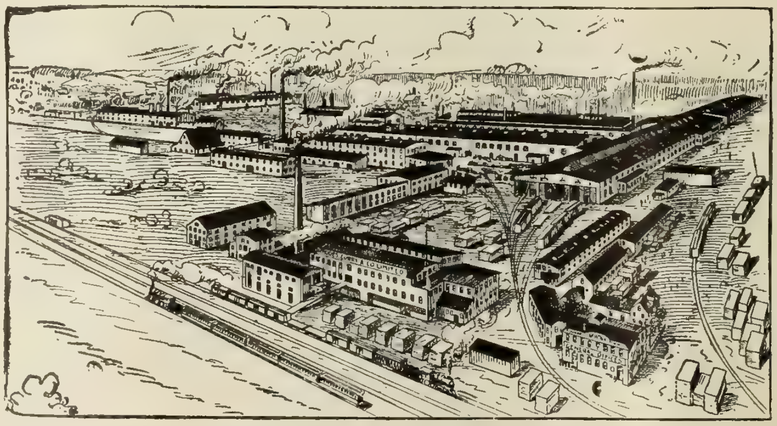

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5401. Oct. 13.—Authorizing Macdonald College to lay a water pipe under C.P.R. at Ste. Anne de Bellevue, Que.

5402. Oct. 15.—Directing that every accident report or information furnished to the board, pursuant to the Railway Act, sec. 292, be privileged and only made public or given upon the Board's order.

5403, 5404. Oct. 14.—Authorizing C.P.R. to use its bridge at Rush Lake, Sask., and the following bridges on its Calgary section: mileage 109.9; mileage 179.1; irrigation canal, near Langdon; and irrigation canal near Strathmore, Alta.

5405. Oct. 14.—Approving Windsor, Essex and Lake Shore Rapid Ry. Co.'s by-law authorizing F. E. Low, General Manager, to issue tariffs of tolls to be charged for traffic carried between Windsor and Leamington, Ont.

5406. Oct. 14.—Authorizing C.P.R. to open for carriage of traffic its line from Stoughton to Weyburn, Sask., provided that speed be limited to 15 miles an hour.

5407. Oct. 14.—Authorizing C.P.R. Co. to place its Goose Lake branch track across the G.T.P.R. in s.e. ¼ sec. 23, tp. 36, r. 6, w. 3 m., west of Saskatoon, Sask.

5408. Oct. 14.—Authorizing the C.P.R. Co. to use bridges at mileage 144.6 and 124.3 on its Medicine Hat section.

5409. Oct. 16.—Authorizing C.N.R. to construct bridge across North Saskatchewan River at Prince Albert, Sask.

5410. Feb. 17.—Authorizing Village of Beaverton, Ont., to place electric light wires across G.T.R. at Mara St.

5411. Oct. 9.—Directing G.T.R. to make refunds on shipments of lumber from Wiarton to Toronto. (See pg. 787.)

5412. Oct. 9.—Authorizing New Brunswick Tel. Co. to place wires across C.P.R. at Wapske, N.B.

5413. Oct. 9.—Approving supplement 2 to standard freight tariff C.R.C. 38 of the C.N.R. between stations west of and including Maryfield, Sask.

5414. Oct. 8.—Approving standard freight tariff C.R.C. 3 of Montreal Terminal Ry.

5415. Sept. 17.—Authorizing G.T.P. to cross highways in Miniota municipality, Man., and directing protection to be provided at the crossings.

5416. Oct. 15.—Authorizing C.P.R. to open for traffic its railway from Piapot, mileage 67.75, to Colley, Alta., mileage 75.10.

5417. Sept. 14.—Authorizing G.T.P.R. to cross at grade the C.P.R. Pembina branch at Oak Point Jct., near Winnipeg.

5418. Sept. 16.—Approving location of new station and rearrangement of C.P.R. yards in St. Boniface, Man., provided platform of said station be removed, if it is found to be in the way upon the extension of Provencher St.

5419. Oct. 9.—Authorizing Canadian Express Co. to carry, free of charge, for 90 days, "The Flag," a publication issued in Great Britain. (See pg. 787.)

5420. Oct. 9.—Authorizing C.P.R. to construct a spur line to the Great West Coal Co.'s premises, Roche Percee, Sask., and rescinding orders 4918 and 5178.

5421. Oct. 8.—Directing C.P.R. to clean out and put in good order ditches leading to and from the culvert 89.9 as far as station 31+18, near Crookston, Ont., and that the work be completed by Nov. 15.

5422. Oct. 15.—Authorizing C.P.R. to construct and operate two spur lines, forming a wye at St. Gabriel de Brandon, Que.

5423. Oct. 15.—Extending until Dec. 15 time within which C.N.Q.R. may instal interlocking plant directed to be provided by order 4862, of June 2, 1908, between mileage 0 and 1 of the Quebec and Lake St. John Ry. junction spur, where same crosses C.P.R. east of Lorette, Que.

5424. Oct. 16.—Extending until Dec. 31, 1908, time within which interlocking plant on G.T.R. at Chatham, Ont., may be installed.

5425. Oct. 15.—Authorizing C.P.R. to construct branch line across St. Gabriel St., St. Gabriel de Brandon, Que.

5426. Oct. 14.—Authorizing Toronto and York Radial Ry. to operate trains across G.T.R. at Sutton, Ont.

5427, 5428. Oct. 16.—Authorizing Manitoba Government Telephone Commission to erect wires across C.P.R. 3½ miles east of Burnside station, and 100 yds. east of Manitou, Man.

5429. Oct. 16.—Authorizing Town of Montreal West, Que., to lay water pipe under G.T.R. on Inspector Ave.

5430. Oct. 16.—Authorizing Manitoba Government Telephone Commission to erect wires across C.P.R. four miles n.e. of Portage la Prairie, Man.

5431. Oct. 16.—Authorizing Smith township, Ont., to construct highway on line and width of Dumble Ave. across G.T.R. in Peterboro county, Ont.

5432-5436. Oct. 16.—Authorizing Bell Telephone Co. to erect wires across G.T.R. at 5 points in Ontario.

5437. Oct. 16.—Authorizing Norfolk County Telephone Co. to erect wires across G.T.R. at Norfolk St., Simcoe, Ont.

5438-5440. Oct. 16.—Authorizing Manitoba Government Telephone Commission to erect wires across C.P.R. near Rathwell, near Wheatlands, and near Burnside station.

5441. Oct. 13.—Authorizing Arundel Telephone Co. to erect wires across C.N.Q.R. at Huberdeau, Arundel, Batesville, and Weir, Que.

5442, 5443. Oct. 16.—Authorizing Dunnville Consolidated Telephone Co. to erect wires across G.T.R. at Cedar St., Forks Rd., Dunnville, and at Canfield Jct., Ont.

5444. Oct. 14.—Authorizing W. Bown, of Lennoxville, Que., to lay water pipe under G.T.R. in Ascot tp., Que.

5445. Oct. 20.—Granting leave to Central Barbed Wire Telephone Co. of Alberta, to erect wires across C.P.R. near Nanton station, Alta.

5446. Oct. 20.—Authorizing Bolton Telephone Co. to erect its wires across C.P.R. in Albion tp., Ont.

5447. Oct. 20.—Authorizing C.P.R. to construct spur line to the Cranbrook Sash and Door Co.'s premises, Kootenay district, B.C.

5448, 5449. Oct. 20.—Authorizing C.P.R. to construct bridges 41.8 and 36.4 on its Boundary section, B.C.

5450. Oct. 20. Authorizing the Minto Rural Telephone Co. to erect wires across G.T.R. in Minto tp., Ont.

5451. Oct. 20.—Authorizing C.P.R. to open for traffic seven portions of its Medicine Hat section.

5452. Authorizing C.N.R. to construct its Goose Lake branch across Avenues A to P and Spadina Crescent, Saskatoon, Sask., under certain conditions as to compensating property owners, to fill in dip on road at Spadina Crescent, to pay the cost of constructing a subway, that any other railway company may run over the company's Goose Lake branch, that gates be erected at Spadina Crescent, etc., etc.

5453. Oct. 16.—Dismissing application Winnipeg Board of Trade and others for order disallowing tariffs of freight rates issued by C.P.R. and C.N.R. (See pg. 785.)

5454. Oct. 6.—Authorizing Brantford and Hamilton Ry. to construct its line across Alfred and Murray sts., Brantford, Ont.

5455. Sept. 14.—Authorizing City of Winnipeg to construct highway crossing over the C.P.R. Brown & Rutherford's spur.

5456. Aug. 1.—Authorizing the James Bay Ry. to place its track across C.P.R. near Wanapitei, Ont.

5457. Oct. 20.—Authorizing South Leeds and Pittsburg Telephone Co. to erect wires across G.T.R. 2½ miles west of Gananoque Jct., Ont.

5458, 5459. Oct. 20.—Authorizing South Leeds and Pittsburg Telephone Co. to erect wires across G.T.R. at two points near Findlay station, Ont.

5460. Oct. 20.—Authorizing Bell Telephone Co. to place wires across Niagara, St. Catharines and Toronto Ry.

5461. Oct. 9.—Authorizing Chatham Gas Co. to lay pipe under G.T.R. west of Queen St., Chatham, Ont.

5462. Oct. 22.—Authorizing C. Gould to erect electric light wires and steel cable across G.T.R. at Uxbridge, Ont.

5463. Oct. 22.—Authorizing C.P.R. to construct nine bridges on the N.B. Southern Ry.

5464. Oct. 22.—Authorizing South Wellington Coal Mines, Ltd., to construct two tunnels under Esquimalt and Nanaimo Ry. on Vancouver Island, B.C.

5465. Oct. 21.—Approving of enlarged interlocking and signal apparatus on application of Chief Commissioner of Lands and Works of B.C. for use on bridge over Fraser River, New Westminster.

5466. Oct. 21.—Authorizing C.P.R. to construct bridge 8.05 over Quaker Brook, N.B.

5467. Oct. 21.—Authorizing C.P.R. to construct spur line to Rat Portage Lumber Co.'s premises, New Westminster district, B.C.

5468. Oct. 21.—Authorizing C.P.R. to construct spur line to Consolidated Mining and Smelting Co.'s premises, Kootenay district, B.C.

5469. Oct. 22.—Authorizing Bell Telephone Co. to place underground wires across N., St. C. & T. Ry. at Stanley St., Niagara Falls, Ont.

Rail Grain Rates from Buffalo.

A New York dispatch of Oct. 20 says: "After hearing arguments both for and against the application, Judges Lacombe, Ward and Noyes to-day refused to grant the injunction staying the order of the Interstate Commerce Commission reducing the rate on grain products from Buffalo to New York points, and from Buffalo to Boston points. The application was made on behalf of the New York Central, Erie, Pennsylvania, Lehigh Valley, Delaware, Lackawanna and Western, and New York, New Haven and Hartford Railroads, and in support of it, it was argued that the present rates charged by the railroads for the carrying of grain products from Buffalo to New York points at 11c. per 100 lbs., and from Buffalo to Boston points of 13c. per 100 lbs., which went into effect May 1, 1907, were just and reasonable, and that the Interstate Commerce Commission's order for a reduction of the rate to New York points to 10c., and to Boston points to 12c., was unreasonable and unfair."

The office of the Freight Inspection Bureau of the Canadian Freight Association for British Columbia lines, of which E. J. Travers is manager, has been transferred from Nelson to Vancouver, B.C.

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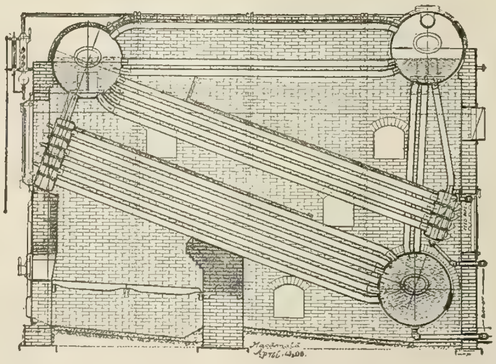

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RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Canadian Western Ry.—The Dominion Parliament will be asked next session for an act incorporating a company with this title with power to construct a railway of standard or other gauge, and to be operated by steam, electricity or any other kind of locomotive power, between the following points: From the International boundary between the east side of range 23, and the west side of range 28, west of the 4th principal meridian, to the C.P.R. Crow's Nest Pass line, between Cowley and Pincher Creek, Alta.; thence northwesterly, following the valley of the north fork of the Old Man River, to the Livingstone Mountains, near sec. 33, tp. 10, range 3, west of the 5th principal meridian; thence through the pass of the Livingstone Mountains along the river valley to High River, near tp. 17, ranges 4 and 5, west of the 5th principal meridian, and thence northeasterly to Calgary; also, a line from the Middle Branch at or near its junction with the Livingstone River, to High River, thence to the Rocky Mountains west of Gould's Dome; thence through a pass in the Rocky Mountains to the valley of the Elk River, and along the valley of the Elk River to a junction with the C.P.R. and the Great Northern Ry. (Crow's Nest Southern Ry., near Michel, B.C.). Power will also be asked to construct branch lines, telegraph and telephone lines, to generate electricity for light, heat and power, to develop water powers, to make traffic agreements with other railway companies, to acquire the franchises of, or to amalgamate with, other companies having similar powers, and to connect with any line of railway in the State of Montana. Hough, Campbell, and Ferguson, Winnipeg, are solicitors for the applicants. (See Alberta and British Columbia Ry., Aug., pg. 547).

Duluth, Rainy Lake and Winnipeg Ry.—A press dispatch from Duluth, Minn., says that construction will be started at an early date upon the line from Virginia, the present southerly terminus of the line, to Duluth, and that the work will be financed by the Minneapolis, St. Paul and Sault Ste. Marie Ry. Whether this be the fact or not, E. Pennington, Vice-President and General Manager of the M., St. P. and S.S. Ry., and W. F. Fitch, President Duluth, South Shore and Atlantic Ry., met representatives of the D., R.L. and W.R., and went over the line early in Oct. At present the D., R.L. and W.R. extends from Virginia, Minn., to the Rainy River, and has connection with Fort Frances, Ont., over a bridge which it owns jointly with the Canadian Northern Ry. It now secures a connection with Duluth over the Duluth, Missabie and Northern Rd. (June, pg. 403).

Howe Sound, Pemberton and Northern Ry.—The plans filed by the promoters of this projected railway show that the line will start from the head of Howe Sound, near the mouth of Squamish River, and follow the valley of that stream to Pemberton Meadows, where it will cross, and then proceed northwards, following easy gradients through the valleys to Anderson Lake, a distance of 92 miles. With the exception of a few heavy cuts, and a couple of large bridges, no great engineering difficulties will be encountered. The plans have been approved by the Government. The line will tap the rich agricultural areas in the Squamish, Pemberton Meadows and Lillooet districts, and open up a route for getting out the timber from extensive areas in the upper valley of the Squamish, and extending back towards the Pemberton Meadows. It is estimated that there is 170,000,000 ft. of marketable standing timber in the area in question, while there are other large unexplored areas, which will be rendered accessible by the construction of this line. There is deep water on Howe Sound right up to the Squamish River, available all the year round, and it is proposed to develop a port there for the export of lumber. The promoters of the company have acquired an area of 71 acres at the mouth of the river, which will be used for wharves and terminal facilities. Part of this land is tide-flat water frontage and the remainder extends some distance up the valley. At Anderson Lake the line will reach a point where water transportation is available, and it is proposed to establish a line of steamers to operate on the lake and the waters tributary thereto. The right-of-way for the line is being secured and it is understood that as soon as this is done, a contract will be let for the construction of the first 15 miles into the Pemberton Meadows. It is hoped to have this portion of the line completed by the end of 1908.

J. C. Gill, ex-Reeve of North Vancouver, B.C., who is one of the provisional directors of the company, recently stated that financial arrangements had been completed, and the construction of the line would be proceeded with as soon as the right-of-way had been secured. It is considered that the present title is rather cumbersome, and it is likely that at the next session of the Provincial Legislature application will be made for an act changing it to the Howe Sound and Northern Ry. (Oct., pg. 713.)

Hudson's Bay Pacific Ry.—Application will be made next session of the Dominion Parliament for an act extending the time for the commencement and completion of the company's projected line of railway. R. V. Sinclair, Ottawa, is solicitor for the applicants. (Oct., pg. 713).

Intercolonial Ry.—An inspection of the facilities at the Island yard, St. John, N.B., was made Oct. 1, by W. B. McKenzie, Chief Engineer; T. C. Burpee, Engineer of Maintenance of Way, and other officials. It is said that the object of the inspection was to decide on the work to be done in preparation for the winter traffic.

It is expected that the new shops at Moncton, N.B., will be ready for occupancy during Nov. The machinery, including the electric transfer table between the passenger car shops, is being installed. The lighting and heating plants have been placed in several of the buildings, and the finishing touches are being given in various directions. (Oct., pg. 713).

International Ry. of New Brunswick.—The Dominion Government has entered into a contract under the terms of the act respecting the granting of aid to certain railways, with the company for the construction of a line from the western end of the 20 miles as already constructed from Campbellton, N.B., to the St. John River, between Grand Falls and Edmonton, N.B., a distance not exceeding 90 miles. Construction is being carried on upon this mileage from both ends and a considerable amount of grading has been done. The general contractor is T. Malcolm, Campbellton, N.B. (Sept., pg. 615.)

Lake Temiskaming to Satika Lake.—A press dispatch from Ottawa, Oct. 16, says a company has been formed at Hull, Que., with a capital of $1,000,000, with the object of constructing about 28 miles of railway, from Lake Temiskaming to the Upper Satika Lake. The line will, it is said, be used mainly to carry ore from the silver mines of the vicinity to the C.P.R. The members of the company are reported to be F. A. Chanterton, H. Dupuis, H. A. Goyette, J. Rene, W. H. Rowley, G. H. Millen, J. N. Fortin, J. E. Gravelle, J. Caron, D. Caron. The construction work, it is said, will be carried out under the supervision of J. Le Flemme, Hull, Que.

Probably the only charter now available for the construction of such a line is that of the Cobalt Range Ry. Co., which was incorporated by the Dominion Parliament in 1906. This act authorized the construction of a railway from Haileybury, via the townships of Bucke, Coleman and Lorraine, to a point opposite Fort Temiskaming, in Pontiac County, Que.; thence across the Ottawa River by means of a railway steam ferry to Fort Temiskaming, thence to Ville Marie, and easterly and southerly either to a point on the proposed Interprovincial and James Bay Ry., between Ville Marie and Kippewa, Que., or to the present terminus of the Lake Temiskaming Colonization Ry., at or near Kippewa Station. The provisional directors of the company are: L. H. Timmins, Mattawa, Ont; J. McMartin, Cornwall, Ont.; J. J. Heney, C. A. McCool, and M. J. Gorman, Ottawa. (See Cobalt Range Ry., Aug., 1906, pg. 451).

Matane and Gaspe Ry.—The United States Consul at Rimouski, Que., in reporting to his Government upon the work in progress upon this line, says it will prove a valuable feeder for the Intercolonial Ry., which it intersects at St. Flavie. For the present the construction of the first section only is contemplated, viz.: From St. Flavie for 37 miles, but it is contemplated to carry it as expeditiously as possible to Mount Louis, 133 miles, the ultimate terminus being Gaspe, 240 miles from St. Flavie. In addition to the subsidy voted by the Dominion Parliament, and the 4,000 acres of land per mile for the 37 miles under construction, by the Quebec Provincial Legislature, the following subsidies have been voted by municipalities through which the line will pass: St. Flavie, $5,000; Little Metis, $500; Sandy Bay, $4,000; Rivière Blanche, $3,000; Matane, $13,000.

We have been officially advised that good progress is being made upon the 35-mile section which has been put under contract. The plans for an extensive bridge over the Metis River are being completed, and it is said that work on the same will be started shortly. The construction of this bridge would enable the contractors to complete the line into Metis, which it is proposed to have done by the fall of 1909. (Oct., pg. 713).

Michigan Central Ry.—The work of constructing a subway under the M.C.R. tracks at Ross St., St. Thomas, Ont., was started Oct. 14. (July, 1907, pg. 479).

Midway and Vernon Ry.—A contract has been entered into between the Dominion Government and the company, under the provisions of the act respecting aid to certain railways, for the construction of a railway from Midway to Vernon, B.C., a distance not to exceed 150 miles. (Oct., 1907, pg. 743).

Prince Edward Island Ry.—Tenders were received to Oct. 31, by the General Manager of Government Railways, for the construction of a branch line from Harmony to Elmira, P.E.I., a distance of about 10 miles. Harmony is a station on the Charlottetown-Souris line, 55 miles from Charlottetown, and five miles from Souris. (Sept., pg. 619).

Quebec Bridge and Ry. Co.—One of the questions which will be considered by the engineers who are preparing plans for the reconstruction of the bridge across the St. Lawrence at Quebec, will be its height above water. When the bridge was originally designed the Boards of Trade and the shipping interests along the St. Lawrence river agreed that a height of 150 ft. above high water mark would be sufficient clearance for vessels passing to Montreal. Since that time the size of vessels has considerably increased, and a recent resolution passed by the Montreal Board of Trade asked the Dominion Government to fix the height of the bridge at 190 ft. above high water mark. (Oct., pg. 713).

Quebec Central Ry.—Location surveys are being made for the extension of the Chaudiere Valley branch from St. George, Beauce,

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Que., to Ste. Justine, Dorchester county, a distance of 30 miles. This is the first section which will be constructed of the line to connect the Q.C.R. with the Temiscouata Ry. The route on which the surveys are being made follows the valley of the Famine River, and is a favorable one for construction. The maximum gradient will be 0.6% and the maximum curvature 5°. Tenders have been asked for the grading of the line from St. George to Ste. Justine, and it is expected to have the 30 miles placed in operation by the end of 1909. (Sept., pg. 619).

Temiskaming and Northern Ontario Ry.—Reports made Oct. 14 stated that the construction gangs had arrived within two miles of Cochrane, the point of junction with the National Transcontinental Ry. The work is being somewhat delayed by reason of the difficulty of securing men. Recently the Commissioners desired to secure 100 men, but were only able to obtain 40, the fact that the engagement offered was to be a short one keeping men from accepting the terms offered.

The Commission proposes to establish a lands department to take charge of the work of furnishing information to settlers on similar lines to the department organized by the C.P.R.

The chairman of the Commission, who has recently returned from a trip over the line, says that between Matheson and Cochrane the railway runs for at least 80 miles through the clay belt before striking the National Transcontinental Ry., and that north of this line there is a vast stretch of splendid arable land. (Oct., pg. 713).

Railway Finance, Meetings, etc.

Alaska Central Ry.—A Spokane, Wash., dispatch states that O. G. Labree, of that city, has been selected to represent the bondholders who had decided to foreclose on the bonds, no interest having been paid. The sale of the railway with its franchises by public auction will, it is expected, bring to an end the dispute between certain of the stockholders which has been going on for over a year. The Sovereign Bank, now being wound up, is the principal holder of bonds.

Alberta Ry. and Irrigation Co.—Approximate net profits, exclusive of land sales, for Aug., $33,835, against $25,896 for Aug., 1907. Aggregate net profits as above from July 1 to Aug. 31, $60,556. Approximate traffic receipts for Sept., $32,315, against $15,761 for Sept. 1907.

The regular annual meeting of the company's shareholders is called to be held in London, Eng., Nov. 4, at which it is proposed to submit for approval a by-law reducing the number of directors to six.

Canadian Northern Ry.—There has been deposited with the Secretary of State at Ottawa, an agreement made between the Imperial Rolling Stock Company and the Canadian Northern Ry., and a mortgage made between the I.R.S. Co., the National Trust Co. and the C.N.R. Co.

A New York financial house is offering for sale $1,700,000 first mortgage 4½% R. bonds issued by the Imperial Rolling Stock Co., and guaranteed principal and interest by the C.N.R. The bonds are due $170,000 yearly, Mar. 1, 1909, to 1918, inclusive, and are secured by a first mortgage on rolling stock costing $2,268,000.

Dominion Atlantic Ry.—Gross earnings for Aug., $151,500, against $175,741 for Aug., 1907. Total earnings for 8 months ended Aug. 31, $763,900, against $792,928 for same period 1907.
ment should take over independent lines in New
The suggestion that the Dominion Govern-
Brunswick and Nova Scotia, and operate them as part of the Intercolonial Ry., a dispatch from London, Eng., says, is not regarded seriously by the officers of the D.A. Ry., at any rate in so far as that railway is concerned. An officer of the company says, should any attempt at expropriation be made by the authorities, the directors would be quite prepared to protect the stockholders' interests. In this connection, reference is made to the fact that some 30 years ago the Dominion Government expropriated the Windsor line, belonging to a predecessor in title of the D.A.R. Co., upon terms which were the reverse of satisfactory. The company appealed to the Imperial Privy Council, in order to secure restitution, and not only succeeded in this course, but obtained a money indemnity as well.

Duluth, Rainy Lake and Winnipeg Ry.—The press reports from Duluth, Minn., that the Hines Lumber Co. had secured control of the Cook and O'Brien interests, which include the ownership of the D., R.L. and W.R., are denied. This railway has a connection with the Canadian Northern Ry. at Fort Frances, Ont., by means of a bridge (owned by the two railway companies jointly) over the Rainy River.

Kingston and Pembroke Ry.—At the annual meeting at Kingston, Ont., Oct. 1, reports as to the operations for the year ended June 30 were presented and approved. The company, which is controlled by the C.P.R., does not issue a separate report. The retiring directors, who are nearly all C.P.R. officials, were re-elected. W. R. Baker, Secretary of the C.P.R., is Vice-President and General Manager.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—An offering of $700,000 of the 7% preferred stock of this company is reported as being made in London, Eng., by Sperling & Co., at 145.

New Brunswick Ry.—The rate of dividend paid to shareholders for the past year has not been made public, but it is understood to be less than those previously paid. The company's railway is leased to the C.P.R., at a fixed rental of $372,829.74, but the company owns a large area of land in New Brunswick, from which additional revenues are drawn. At June 30, 1907, the company reported to the Dominion Government that there was outstanding $4,780,800 of common stock and $7,821,127 of bonds.

North Shore Power, Ry. and Navigation Co.—The annual meeting of the shareholders, announced to be held Oct. 5, we were informed Oct. 2, would likely be postponed, the members of the company being so widely scattered.

North Shore Ry.—The Beersville Coal Co. is reported to have paid up the overdue royalties on its colliery properties, and to be preparing to resume mining. It is from these mines that the principal freight traffic of the N.S.R. is drawn.

Quebec Central Ry.—Gross earnings for July, $129,977.55; expenses, $78,035.34; net earnings, $51,942.21; Aug.: Gross earnings, $110,883.45; expenses, $73,279.22; net earnings, $37,604.23; against $113,055, gross earnings; $69,604.73, expenses; $43,451.23, net earnings, for July, 1907, and $110,919.13, gross earnings; $68,350.74, expenses; $42,568.39, net earnings, for Aug., 1907. Gross earnings for 2 months ended Aug. 31, $240,861.00; expenses, $151,314.56; net earnings, $89,546.44; against $223,975.09, gross earnings; $137,955.47, expenses; $86,019.62, net earnings for same period 1907.

Quebec Southern Ry.—South Shore Ry.—The Court of Exchequer has before it a number of appeals against the rulings of the referee, on the distribution of the $1,051,000 resulting from the sale under the order of the court of these railways. The claims of the Bank of St. Hyacinthe, the Standard Trust Co., and of the Lodge-White interests, are among the principal of the appellants. Judgment has been reserved in all cases.

Shuswap and Okanagan Ry.—Net earnings for 3 months ended June 30 were $9,097, against $9,925 for same period 1907.

Temiscouata Ry.—Following are the officers and directors for the current year: President, F. Grundy; Vice-President, J. H. Walsh; Sherbrooke, Que.; other directors, W. Cook, K.C.; A. H. Cook, K.C.; W. N. Campbell, A. Laurie, Quebec, Que.; A. Steele, Sherbrooke, Que.; Secretary and General Manager, D. B. Lindsay; Superintendent, G. G. Grundy, Riviere du Loup, Que.

Traffic receipts for July, $22,717.80; Aug., $25,374.27; Sept., $21,772.16. Total receipts 9 months ended Sept. 30, $170,473.69.

Temiskaming and Northern Ontario Ry.—Gross earnings for July, $96,841.82; expenses, $54,441.08; net earnings, $42,400.74; gross earnings for Aug., $96,068.31; expenses, $49,290.83; net earnings, $46,767.48. Approximate gross earnings for Sept., $86,685.62.

White Pass and Yukon Ry.—Gross earnings for Aug., $231,819; total earnings for 2 months ended Aug. 31, $486,051.

W. Whyte, Second Vice-President C.P.R., has again denied the reports which seem to be put in circulation annually about this time of year, that the C.P.R. is about to purchase the W.P. and Y.R. The reports came this year from Spokane, Wash., and originated in a recent meeting between Mr. Whyte and the President and General Manager of the W.P. and Y.R.

Ottawa Agents for Railway Companies.

The various railway companies under the Board of Railway Commissioners' jurisdiction have been notified to comply with the following amendment to the Railway Act:

"41a. There shall be kept in the office of the Secretary of the Board a book, to be called the agents' book, in which every railway company to which this Act in whole or in part applies, shall enter its name and the place of its head office and the name of an agent at Ottawa, and his place of business, or some other proper place within Ottawa where he may be served for the company with any notice, summons, regulations, order, direction, decision, reports or other document."

◆

Car Efficiency.—The statement of car surpluses and shortages at Sept. 30 has been issued by the American Railway Association's committee on car efficiency. It shows a further decrease of 39,795 in the number of surplus cars, bringing the total down to 133,792. Of this decrease 16,075 are box cars, and 17,096 coal and gondola cars. The improvement is most marked on the eastern, middle, southern and Canadian lines, the decrease on Canadian lines being equivalent to over 50% of the total surplus in this group. The large movement of grain in Western Canada has also resulted in a shortage of box cars in this territory, which should, however, be only temporary. The shop reports indicate some further reductions in the number of bad order cars. The figures for the four Canadian lines reporting show surpluses of 752 box cars; 380 flat cars; 415 coal, gondola and hopper cars, and 1,497 other kinds, a total of 3,043 cars, against 7,873 on Sept. 16, and 43 on Oct. 30, 1907. The shortages were: 4,403 box cars, 220 flat cars, a total of 4,623, against none on Sept. 16, and 8,091 on Oct. 30, 1907.

T. Greenway, who was recently appointed to the Board of Railway Commissioners for Canada, and whose photograph, together with biographical details, was published in our October issue, died at the Windsor Hotel, Ottawa, Oct. 30, aged 70. He contracted asthma while travelling from Manitoba to Ottawa to enter upon his duties.

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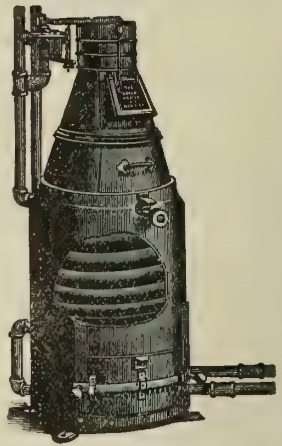

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Canadian Ticket Agents' Association.

This year the Association departed from its usual practice of the last few years and, instead of making a long trip, visited Detroit, Mich., in October, where perfect weather was enjoyed and an exceedingly pleasant time spent. The party assembled at Detroit on Oct. 6. The headquarters were at the Cadillac Hotel, the accommodation provided being thoroughly up-to-date and satisfactory in every way.

The annual meeting opened at 10 a.m., R. J. Craig, of Cobourg, Ont., First Vice-President, occupying the chair in the absence of the President, C. R. Coleman, of Truro, N.S. Mayor Thompson, of Detroit, addressed the members, extending a hearty welcome, which was acknowledged on behalf of the Association by M. McNamara, of Walkerton, Ont. The roll call showed 73 members present, 46 of whom were accompanied by their wives.

The Secretary-Treasurer, E. de la Hooke, read the following report: "I have about as much to say as usual, but I regret to say not as many to talk about. This year's membership totals only 184, as against 205 last year, a decrease of 21, notwithstanding that 16 new members were enrolled. I am pleased to report that this dropping out has not occurred amongst the older members, for in the first hundred on the list only five have not paid their subscription for the current year. The delinquents are from the ranks of the newer members, and this proves to my mind that many men join simply for the purpose of taking some particular trip that suits their desires—this accomplished, they desert the ship—such members are not wanted—such action is not fair to the Association nor to the transportation companies who treat us so liberally. It is hoped that in considering the readjustment of amount of entrance fee and annual subscription, for which notice of motion has been given, some means will be devised whereby it will be made more difficult for men to misuse the privileges. It would be much better for us to travel under shortened sail with a crew that can be depended upon than under full sail with a crew that cannot be found when wanted. With a decline in numbers the receipts must necessarily decrease, in addition to which there was an unexpected call on the funds to meet the losses on the Winnipeg trip last year, mainly attributable to the absence of members and their wives, for whom provision had been made. Had all come who had been provided with transportation, all expenses would have been met. The receipts for the year, including balance brought forward, were $604.15, the expenses $508.27, in which latter is included the Winnipeg shortage of $86.53. The accounts have been audited and signed as correct by Auditor Hodgens, who much to his regret is prevented from being with us owing to business engagements, and are now presented for your inspection and approval.

"Past President Jackson represented us at the 54th annual convention of the American Association of General Passenger and Ticket Agents, and will during the day give us his experiences. G. T. Bell, G.P. & T.A. of the G.T.R., was elected President, and as he has at all times taken an interest in our Association and helped it in every way possible, it is thought that a resolution conveying to him our congratulations would be in order, as also to C. B. Foster, who has recently been promoted to the position of A.G.P.A. of the C.P.R. at Vancouver, and who on many occasions worked very hard to promote our interests and enjoyment.

"It is most desirable, and it may be almost added advisable, that our meeting proper should assume a more business character. Subjects should be brought forward and discussed which would be of interest and advantage to all present, both as audience and participants—this can only be done by the co-operation of all, who should bring before the meeting such matters closely allied with railway business as they think worthy of attention. The opinion has gone abroad that our annual gathering is little better than a junketing trip, from which men return no better off in information on any subject than when they started—the sooner measures are adopted and put in practice to disprove this the more will the Association prosper."

The Secretary-Treasurer's report having been adopted, W. Jackson, of Clinton, Ont., made a verbal report of his attendance at the meeting of the American Association of General Passenger and Ticket Agents, at Toronto in September, as the representative of the C.T.A.A., and several members expressed their warm appreciation of his address before the A.A. of G.P. & T.A., as published in THE RAILWAY AND MARINE WORLD for October.

On motion of G. J. Alexander, of Richmond, Que., seconded by W. Jackson, it was resolved that, whereas the American Association of General Passenger and Ticket Agents, at their convention held recently in Toronto, elected as President a Canadian, a representative of one of our Canadian railways, and a staunch friend of the C.T.A.A., in the person of G. T. Bell, General Passenger and Ticket Agent, G.T.R., be it resolved that this Association desires to express to Mr. Bell its heartiest congratulations upon the honor conferred upon him by the American Association, and to wish him health and success in the coming year.

On motion of M. McNamara, seconded by S. B. Morris, of Rodney, Ont., it was resolved that this Association heartily congratulate C. B. Foster, until recently District Passenger Agent C.P.R., Toronto, who has been promoted to the position of Assistant General Passenger Agent at Vancouver. Mr. Foster has been a true friend of the Association and also of practically every ticket agent, both G.T.R. and C.P.R., as well as of other lines in his district. His promotion is well merited, and the Association hopes that his promotion will continue until he reaches the highest position in the Passenger Department.

On motion of W. Hewson, Niagara Falls, Ont., seconded by J. C. Whitchelo, Parry Sound, Ont., a vote of thanks was passed to the City of Edmonton, for courtesies extended to members who visited that place after the Winnipeg meeting in 1907.

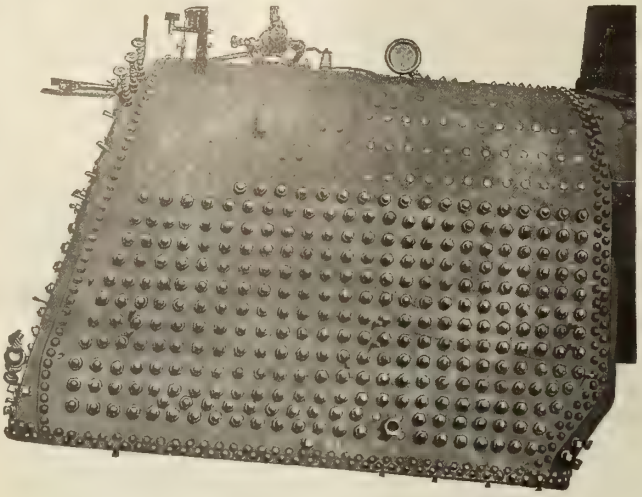
F. W. Churchill, Collingwood, Ont., reported on behalf of the Committee, consisting of M. McNamara, W. E. Rispin, of Chatham, and himself, who were appointed by the Executive Committee last spring, to suggest means to be adopted to extend the Association's usefulness. He explained that owing to the members of the Committee being widely scattered, no meeting had been held until that day, there was therefore no written report and he could only present his own individual views. He pointed out that the Association is composed of varied interests: There is the city ticket agent, on salary, whose sole occupation is railway business. Then there is the agent who is engaged in some mercantile pursuit, who is unable, and frequently uncalled upon, to devote more than a limited amount of his time to the selling of tickets. To a very large extent the membership is composed of the latter class, some do but a very small business, while others handle a very considerable volume in the year. To the time-tried salaried man, matters which might be brought up for discussion at meetings might appear trifling and often uninteresting, and questions which might be addressed by members new to the business, would frequently appear to be puerile. But it is essential, if the Association is to be lifted out of the rut into which it has of late years fallen, that some strenuous efforts should be directed to making its meetings of greater interest and usefulness, and not to continue to meet merely to transact a small amount of routine business, elect officers and jaunt.

There are numbers of matters which could very properly be discussed from year to year, and which would naturally be educational and beneficial, two of the leading features of the constitution which have been practically lost sight of and become dead letters, excepting in so far as the observant agent may pick up points as to terminals, junction points and so on, which come immediately under his notice during the annual trip to and from the meeting places. Such matters as advertising, the multiplicity of supplements to tariffs, the question of the abolition of the reduction on round trip ocean rates, etc., would seem to be fit subjects for discussion, but unless the members as a whole take part in the discussions and lend their aid and experience to make the meetings more interesting, it is useless to expect that any good results will be attained. The success of the Association depends upon the members themselves, and if questions on various matters were sent to the Secretary, at the opening of the meeting, if desired without a name appended, they would provoke discussion, and lead from one point to another, thus bringing out matters of interest and usefulness, and he appealed to the members as a whole to take their part in making the meetings attractive and beneficial, and not to leave the discussion to a few, and then go home with the feeling that no personal advantage has been gained by their attendance, except the little outing and the social meeting. He also suggested that each year, when the first circular was issued, that the executive committee, or the President and Secretary, should name two or three subjects, which would be brought up for discussion at the meeting, asking different members to open the discussions, with the request that the members as a whole would take part, also that a request be made to members to send in to the Secretary, before the issue of the second circular, suggestions for subjects which they would like to have brought before the meeting. In this way, the meetings would prove advantageous to the members, would raise the association to a higher level and give it more weight. He felt certain that the older and more experienced members would give freely of their knowledge, and he appealed to the members generally to use every effort to increase and extend the usefulness of the Association, so that at the close of every meeting they might separate, feeling that not merely pleasure, but knowledge, had been gained.

In the discussion which followed, W. E. Rispin supported Mr. Churchill's views. He thought at least a whole day should be given by the members to business, and that papers should be prepared in advance and thoroughly discussed. The question of advertising should be fully considered, particularly what methods produce the best results. The elimination of return trip tickets by ocean steamship lines was another important subject.

M. McNamara did not see much room for improvement in the Association's methods. The majority of members were engaged in other business also, and gave as much time to the ticket business as the profit on it warranted. There was no encouragement to get business for foreign lines, as commissions had been abolished, and even transportation had been cut off. He kept an index of tariffs received and seldom had to write to headquarters for rates. He looked on the annual trips largely as outings, but believed the geographical knowledge obtained on these trips was very useful to the members in their work. Advertising was largely an individual matter.

C. B. Janes, Orillia, Ont., urged a better method of keeping folders, especially the



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steamship ones, for display and reference, and thought the companies should supply racks.

W. Bunton, Peterboro, Ont., found no difficulty about sailing lists, etc., but thought if the matter was represented to the steamship companies, they would supply racks or binders.

W. McElroy, Peterboro, Ont., said the C.P.R., Allan and Cunard S.S. lines supplied binders for sailing lists, rates, etc. The railway companies controlled their own advertising and local agents had nothing to do with the matter used; contracts were made with the local papers direct and the matter was prepared in the district passenger agent's office. He favored the Association's yearly trip. Men who work hard all the year selling tickets were entitled to a holiday, but he thought there should be more discussion at the meetings. He suggested as a topic a round trip ticket say to Vancouver, the leader of the discussion to point out the various routes, rates, junction points, etc. This might be followed by a similar discussion on trips to Europe and round the world. At the suggestion of the chairman, he promised at the next meeting to lead a discussion on a round the world trip.

G. H. Clark, Orillia, Ont., said that questions which might appear simple to some city agents, were of great importance to country agents, and urged that full attention be given them. He did not know any business that would give better results than the ticket business for the time devoted to it. Steamship companies should provide facilities for displaying and filing advertising matter. The annual outing should be a business affair as far as possible.

G. A. Joyce, Woodstock, Ont., emphasized the necessity for devoting more time to business on the annual trips. He thought the passenger departments should have more control of the passenger train service. Salaried men selling tickets were often handicapped as compared with men on commission.

W. E. Rispin said he controlled the advertising done for his office. In addition he did considerable at his own expense and thought the question of what kind of advertising produces the best results should be thoroughly considered by the Association. He found the general passenger agents very willing to consider suggestions.

R. J. Craig, C.P.R., Cobourg, Ont., said the District Passenger Agent consulted him about advertising.

J. Clark, C.P.R., Renfrew, Ont., said that in addition to the company's advertising, he put in a local reader in each of the weekly local papers. The abolition of commission on foreign business had entirely changed the agent's position. In the case of a ticket for California, the profit was on the portion to Detroit only; there was nothing on the balance and agents were not called on to spend a lot of time looking up routes and rates for which they got no compensation.

S. B. Morris suggested that at each annual meeting a representative of the line travelled over should attend with a large map, and thoroughly explain the route, its junction points, etc. He thought that Mr. McElroy, instead of reading a paper, should have a map and illustrate a typical trip by it. Affiliation with the A.A. of G.P. & T.A., which had been suggested, was not feasible, but he thought that Association might be asked to send a representative to the C.T.A.A. meeting to read a paper or make an address. He moved that, whereas the railway companies are now issuing supplements to the number of between 20 and 30 to tariffs, making it practically impossible for outside ticket agents to keep familiar with the many supplementary changes, which militate against not only him in the discharge of his duties, but against the company he represents, be it resolved that this Association draw the attention of the various companies to the necessity of not issuing more than two or three supplements to any passenger tariff. The motion was adopted.

A. H. Baird, Paris, Ont., pointed out that it was important to destroy steamship folders, etc., on hand when new issues were received, so as not to get them mixed up.

F. W. Churchill thought advertising was left largely to local agents, who, of course, must spend something themselves. His company (C.P.R.) asked him to supply readers to the local papers. Agents on commission were doing a lot of work for which they got nothing. Correspondence had been largely increased, especially in regard to tourist car reservations. He thought an increase of commission should be asked.

W. Jackson, Clinton, Ont., said that as regards the C.P.R. Ontario passenger district, advertising copy is prepared in the district passenger agent's office, and sent to the local papers through an advertising agency, without the local agents being consulted. Frequently his name was not even mentioned. He thought the matter should be sent to the papers through the local agent, who could often secure better positions and other favors.

G. H. Clarke, Orillia, Ont., said the G.T.R. District Passenger Agent's office at Toronto prepared the advertising and sent it to the local agent to take to the papers and of course the agent could always see that his name was given. He thought agents should furnish all the information they could, whether they made anything out of it or not. Civility always paid and produced business in the end. In a case where he sold a lady a ticket to New York, via G.T.R. and Lehigh Valley, she came back and wanted to travel via New York Central. He refunded her money and a few days afterwards a friend she had been staying with came to him and bought several tickets.

W. McIlroy cited the case of a farmer who came to his office to ask about freight rates. He had nothing to do with freight, but got the information, and a little later the farmer came back and bought tickets to the Northwest for his whole family.

W. Hewson hoped transportation on U.S. lines would be restored, but thought it should be limited to agents who are members of the Association.

W. Bunton agreed with the policy of civility, but pointed out how galling it was when people took up a lot of a town agent's time and then bought tickets at the station.

At the afternoon session there was a lengthy discussion on the membership fee, which resulted in article 3 of the constitution being amended to read as follows:

> "Any ticket agent in charge of a coupon ticket office in Canada may become a member of the Association upon payment of $5.00 for the annual subscription, provided that the applicant can furnish proof to the Secretary (if considered necessary) that he is a regularly appointed agent of the line he claims to represent, which, being done, the Secretary shall issue to him a certificate of membership. The annual subscription of $5.00 is payable in advance on January 1st in each year, and prompt payment is demanded.

The election of officers, etc., resulted as follows: President, R. J. Craig, C.P.R., Cobourg, Ont.; 1st Vice-President, Lt.-Col. E. G. Piche, C.P.R., Joliette, Que.; 2nd Vice-President, J. P. Hanley, G.T.R., Kingston, Ont.; 3rd Vice-President, S. B. Morris, C.P.R., Rodney, Ont.; Secretary-Treasurer, E. de la Hooke, G.T.R., London, Ont.; Auditor, F. E. Hodgens, Clinton, Ont.; Executive Committee, W. Jackson, C.P.R., Clinton, Ont.; W. McIlroy, C.P.R., Peterboro, Ont.; J. F. Dolan, R. & O.N. Co., Montreal; M. McNamara, G.T.R., Walkerton, Ont.

In the evening the members had a Dutch lunch at the Cadillac, which was a very enjoyable affair, with an excellent programme of vocal and instrumental music and a most interesting exhibition of legerdemain. C. A. Cairns, General Passenger and Ticket Agent, Chicago and Northwestern Ry., and J. Francis, General Passenger Agent, Chicago, Burlington and Quincy Rd., were among the guests and gave brief addresses. The ladies attended the Temple Theatre and afterwards had a charming supper at the Cadillac.

On Oct. 7 and 8, the party were the guests of the terminal lines, etc., in Detroit, being most liberally entertained and given splendid opportunities of seeing the beauties of Detroit as a city, and also its charming surroundings. On the morning of Oct. 7, they embarked on the steamboat Promise, and had a two-hour ride on the Detroit River, from Lake Erie to Lake St. Clair, getting excellent views of the Detroit, Windsor and Walkerville water fronts. In the afternoon they went by special electric cars to Mount Clemens, Mich., where they were received by the Board of Trade, taken through the bath houses and entertained at the hotels. In the evening there was a theatre party at the Lyceum Theatre. On the morning of Oct. 8, the party were taken round Belle Isle in automobiles.

On behalf of the Association, H. W. Jameson, District Passenger Agent, and J. W. Kearns, Travelling Passenger Agent, Pere Marquette Rd., were presented with a pair of gold cuff links and a gold tie pin, respectively, in appreciation of their untiring efforts as members of the local entertainment committee.

As on all occasions, the various arrangements for the meeting were looked after by the Secretary-Treasurer, E. de la Hooke, in the most thorough manner, and the resolution granting him the usual honorarium was unanimously adopted by the meeting with great enthusiasm.

Great Northern Ry. Lines in Canada.

Emerson to Winnipeg.—Survey parties have been at work since the beginning of Oct. in locating a line from the International boundary near Emerson, Man., to Winnipeg. A party has also been at work locating a route from Noyes at the boundary southeasterly to Greenbush, Minn., the present terminus of the branch from Dugdale, which it has been planned to extend to War-road, a station on the section of the Canadian Northern Ry. in Minnesota. Noyes is the union station for the G.N.R. and the Minneapolis, St. Paul and Sault Ste. Marie Ry., and the new line to Winnipeg is being surveyed to run west of the C.P.R. and paralleling it to the city. Near the city limits it will make a detour, entering from the west. The point of entry will be between Ross and Pacific Avenues, where the G.N.R. owns a considerable area of property, on which it is likely that a freight yard will be laid out. The freight yard and sheds will, it is said, be erected jointly with the Northern Pacific Ry., which is interested with the G.N.R. in the project. Local reports state that construction will be started at once and that the new line will be in operation within a year. At present the G.N.R. secures a connection with Winnipeg over the Canadian Northern Ry.

Sherwood, N.D., Westerly.—L. W. Hill, President G.N.R., recently completed a trip from Sherwood, N.D., the terminus of a branch line just south of the International boundary, west of the Manitoba-Saskatchewan boundary, through Southern Saskatchewan, and Glasgow, Mont., on the main G.N.R. line. Some engineering parties are in the field in this territory for the company, and local reports state that their object is the location of lines in Canada to connect up various portions of the company's lines, so as to give a through connection in Canada between Winnipeg and Vancouver, B.C.

Midway Westerly.—In connection with the contract recently signed for the construction

(Continued on page 803.)

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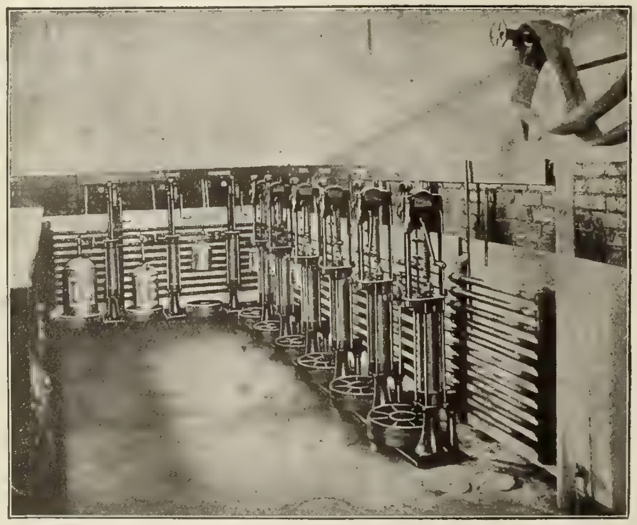

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TORONTO, CANADA, NOVEMBER, 1908

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◆

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PRESIDENT, C. A. Jaques, Montreal.
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Niagara Frontier Summer Rate Committee.

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SECRETARY, Jas. Morrison, Montreal.

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Quebec Transportation Club.

PRESIDENT, E. A. Evans; SECRETARY, A. H. Davis, Box 324, Quebec.

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The Shipping Federation of Canada.

PRESIDENT, H. A. Allan, Montreal; MANAGER AND SECRETARY, T. Robb, 526 Board of Trade, Montreal.

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Goldschmidt Thermit Co	808
Grand Trunk Railway	794
Greening, The B., Wire Co., Ltd	834
H and E Lifting Jack Co	806
Hamilton Steel & Iron Co., Ltd	788
Hart-Otis Car Co., Ltd	Cover 2
Hayes Track Appliance Co	808
Holden, N. J., Co	—
Hopkins, F. H., & Co	774
Hotchkiss, Blue & Co	834
Hotel Cadillac, Detroit, Mich	Cover 1
Hudson's Bay Company	804
Hunt, Robert W., & Co	826
Hunter-Rose Co., Ltd	830
Hutton, James, & Co	832
Illinois Central Railroad	832
Imperial Bank of Canada	834
Intercolonial Railway	802
International Correspondence Schools	792
International Marine Signal Co	818
International Mercantile Marine Co	822
Jessop, Wm., & Sons, Ltd	828
Kerr Engine Co., Ltd	812
Knowlton, W. H	832
Latrobe Steel & Coupler Co	824
Lewis, Rice, & Sons, Ltd	798
Lima Locomotive & Machine Co	824
Lufkin Rule Co	Cover 1
Mail Job Printing Co., Ltd	834
McCaskill, Dougall & Co	Cover 1
McConway & Torley Co	782
McCord & Co	790
McDougall, John, Caledonian Iron W'ks Co., Ltd.	830
McGregor-Banwell Fence Co., Ltd	816
Metcalf, John S., Co	830
Midland Towing & Wrecking Co., Ltd	831
Modoc Soap Co	828
Montreal Locomotive Works, Ltd	768
Montreal Steel Works, Ltd	780
Mussens Limited	Cover 1 and 770
National Malleable Castings Co	Cover 1
New Hotel Brevoort, Chicago, Ill	800
Norton, A. O	776
Ontario Wind Engine and Pump Co	826
Orford Copper Co	798
Ottawa Car Co. Ltd	Cover 1
Owen Sound Wire Fence Co., Ltd	824
Parry Sound Lumber Co., Ltd	Cover 1
Phillips, Eugene F., Electrical Works, Ltd	832
Piper, The Hiram L., Co., Ltd	834
Piper, N. L., Railway Supply Co., Ltd	806
Polson Iron Works, Ltd	788
Porter, H. K., Co	780
Positive Lock Washer Co	828
Preston Car & Coach Co., Ltd	834
Pyke, J. W., & Co	802
Pyle National Electric Headlight Co	786
Rail Joint Co. of Canada, Ltd	Cover 1 and 778
Railway Materials Co	Cover 1
Rendle, A. Edgcumbe	Cover 1
Rhodes, Curry & Co., Ltd	790
Robb Engineering Co., Ltd	792
Safety Car Heating & Lighting Co	778
Saxby and Farmer, Ltd	Cover 1
Simplex Railway Appliance Co., Ltd	Cover 4
Smart, James, Mfg. Co., Ltd	810
Standard Coupler Co	812
Standard Explosives, Limited	810
Standard Steel Works	812
Submarine Signal Co	818
Taylor & Arnold	796
Toronto Bolt and Forging Co., Ltd	816
Toronto Pressed Steel Co., Ltd	818
Vulcan Iron Works	831
Washburn Steel Castings & Coupler Co	802
Wire & Cable Co	Cover 1
Wolfe Brush Co	828
Woodman, R., Mfg. and Supply Co	826

◆

Canadian Iron Corporation.—A Montreal press despatch of Oct. 9 said: "The prospectus of the Canadian Iron Corporation, the company which is to absorb and amalgamate the Drummond iron interests in various provinces of Eastern Canada, has been issued. The president is T. J. Drummond and the directors are: G. E. Drummond, Edgar McDougall, C. C. Chipman, H. Cockshutt, G. Girdwell, while the London committee is composed of Sir James Heath, J. Hamilton Boven and R. W. Cooper. The London bankers are offering for subscription $1,870,000 6% 1st mortgage bonds out of a total of $2,500,000, the balance being taken by holders of existing bonds in the old companies. The stock issue is $5,000,000 ordinary and $3,000,000 6% preferred shares.

R. F. Macfarlane, Passenger Manager Dominion Steamship Line, Montreal, is treasuring, as a souvenir, the first passenger ticket issued by the G.T. Pacific Ry., which he secured as a passenger on the first train out of Winnipeg, at the recent inauguration of that line.

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MONTREAL.

Great Northern Ry. Lines in Canada.

(*Continued from page* 799)

of the Midway and Vernon Ry., a report from Nelson, B.C., states that a project of some importance to the Boundary country has been engaging the attention of the C.P.R. and the G.N.R. officials. It is for the connection of the lines of the two companies at Midway, and the construction of a bridge across the Kettle River, as a joint work. The C.P.R. has a line planned to connect up the B.C. Southern Ry. with the Nicola, Kamloops and Similkameen Ry. at Nicola Lake, and the Midway and Vernon Ry. would connect the B.C. Southern Ry. with the C.P.R. branch now running to Vernon from Sicamous Junction. The G.N.R. line touching Midway is the Vancouver, Victoria and Eastern Ry. The three interests have had considerable difficulty in locating lines in the vicinity of Midway, and some clashes took place between construction parties some three years ago at Midway. If there is anything in the present reports, it would appear that the difficulties are in a fair way of settlement.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—Plans have been approved for the proposed terminals at Vancouver, B.C., including wharfage facilities on Burrard Inlet, etc. A. Stewart, the company's Assistant Chief Engineer, and J. S. Snapp, Right-of-Way Agent, have been in the city recently in connection with the matter. Application is being made to the Board of Railway Commissioners to authorize the construction of a branch line from False Creek to Burrard Inlet. Referring to this a Vancouver paper says this notice means that the company has abandoned the old short line to Burrard Inlet over which there was such a hard fight between the Vancouver, Westminster and Yukon Ry. and the city authorities. The V.W. and Y. Ry., which sold its rights in Vancouver to the V.V. and E. Ry., contended successfully for level crossings on the line it proposed to construct. The plans also show that the company proposes to take into its construction scheme the Gore Ave. slip and to expropriate a section of foreshore adjacent thereto.

Some construction is being done in connection with the company's plans, notably the reduction of the gradient where the track rises from the east end of False Creek, and on the completion of this the work of filling the east end and the south side of False Creek will be proceeded with. Room will thus be made for a series of tracks to accommodate standing cars, and for the erection of warehouses and shops. It is hoped to complete this work during the winter, so as to enable a start to be made in the spring upon the construction of the line to the water front at Burrard Inlet, where the company owns 2,000 ft. of frontage.

Victoria and Sidney Ry.—The improvements to the roadbed are practically completed, and the repairs to the dock at Sidney have been finished. (Oct., pg. 907).

Canadian Northern Ry. Construction, Etc.

Canadian Northern Quebec Ry.—The cut-off which has been under construction for the past three years from near Garneau Junction into Quebec, a distance of 80 miles, is expected to be placed in operation Dec. 1. The new line opens up a lot of new territory, which is expected to prove of great value for colonization and tourist purposes, and passes through the towns of St. Casimir, Port Neuf, Cap Santé, Cap Rouge and St. Foye. The C.P.R. is crossed at Lachevrotiere, about 45 miles from Quebec. By this route the company will secure a direct route between Ottawa and Quebec, and Montreal and Quebec, saving a considerable distance over its present route, via Rivière à Pierre, and the Quebec and Lake St. John Ry.

A contract has been let to J. P. Mullarkey, Montreal, for the construction of a branch of 10 miles from St. Jacques to Rawdon, Que. Rawdon was one of the points to which a considerable settlement was directed about 70 years ago, and as long ago as 1857, a company with the title of the Rawdon and Industry Ry. was incorporated to give it railway connection. The district is now better known for its attractions to tourists and hunters than for its agricultural possibilities. The line will be constructed for a considerable distance along the parish line between St. Jacques and Ste. Julienne. The right of way is being purchased, and on such portions as have been acquired gangs of men are engaged in effecting a clearing. The grading is expected to be started at once.

Canadian Northern Ontario Ry.—The line from Hawkesbury to Ottawa is expected to be completed during the winter, but it is not expected to open it for traffic until Mar. 1, 1909.

Canadian Northern Ry.—Work on the joint terminal station at Winnipeg is reported to be making satisfactory progress. The general contractors, P. Lyall & Sons, are proceeding with the piling and getting in of the concrete foundations. The Dominion Bridge Co. is preparing to put up the structural steel at the new freight sheds.

The actual hauling of freight trains was announced to be started Oct. 6, and it was expected that the operating department will take over the completed Brandon-Regina line by the end of the month, or as soon before as the Board of Railway Commissioners had given permission for it to be put in operation.

A tracklaying gang arrived at Saskatoon, Sask., Oct. 6, and went out to Delisle, the present terminus of the Goose Lake branch, to resume tracklaying. At this point there is on hand steel for laying 29 miles of track, and ties sufficient for 75 miles. The grading gang is working beyond Zolandia. W. Mackenzie, President, stated when he was recently in the district, that it was hoped to be able to complete the construction of the line to 75 miles from Saskatoon this year. The portion of the line between Saskatoon and Delisle is being ballasted. When the Board of Railway Commissioners was in Saskatoon Sept. 23, the question of the entrance into the city of this branch was discussed. The Commissioners will give the city permission to construct a footbridge across the tracks at 20th St., a subway is to be constructed at another point, at the cost of the C.N.R., and other work done. The route to be followed by the line is by the crescent on 17th St., and the Commissioners fixed the amount to be paid to property owners for the right-of-way, etc.

The branch from Dalmeny, just west of Warman, Sask., was completed Oct. 1, when steel was laid to Laird. It is said that the line will be extended a few miles further to Carleton next year. The line serves a district which has been settled for some years, and has hitherto been served by Rosthern and other stations between Warman and Prince Albert.

The contractors are making satisfactory progress with the construction of the railway and general traffic bridge across the Saskatchewan River at Prince Albert. The false work is in place, and the bridge company expects to get the actual erection work started at once.

W. Burns and E. M. Hill, of the C.N.R. engineering staff, returned to Edmonton, Alta., recently from the Brazeau River district. The Mackenzie, Mann & Co. interests own some 20,000 acres of mineral lands in that district, and the object of the engineering party's work during the summer was, it is said, to make a thorough examination of the field and to locate a line of railway to the G.T. Pacific Ry. It is reported that a satisfactory route has been found, the gradient being such that it will be possible to run the loaded cars from the collieries to the railway, about 50 miles, by gravity. It would thus only be necessary to maintain locomotives for the purpose of hauling back the empty cars. It is expected that development work will be undertaken on the coal mines at once, and that construction operations will be started on the railway in the spring. D. D. Mann, Vice-President C.N.R., stated in Montreal, Oct. 14, that the company contemplated the immediate development of the coal lands in the Brazeau district. The railway will probably be constructed in time to link up with the G.T. Pacific Ry., which is expected to reach the district by the end of 1909. (Oct., pg. 723.)

Corrections for the Erring.

> "W. G. Brownlee, general superintendent of transportation for the Grand Trunk Railway, has been appointed assistant general manager of the Grand Trunk. Mr. Brownlee will be succeeded on the Grand Trunk System by L. J. Ferritor, superintendent of the Wabash Railway at Peru, Indiana. Mr. Brownlee's new headquarters will be at Winnipeg."—Canadian Machinery, October.

W. G. Brownlee is not General Superintendent of Transportation for the G.T.R. He is General Transportation Manager, and he has not been appointed Assistant General Manager. What our contemporary probably intended to say, judging by the second sentence above quoted, was that Mr. Brownlee had been appointed Assistant General Manager G. T. Pacific Ry., as a press dispatch to that effect was current at the end of August. In pursuance of our policy to publish only official information in regard to appointments, we made enquiries at the time of both the G.T.R. and G.T.P.R. managements, and were advised that Mr. Brownlee had not received an appointment on the G.T.P.R., and that Mr. Ferritor had not received an appointment on the G.T.R. We therefore stated that we were in a position to deny the press report referred to.

> "E. P. Gutchins, engineer in chief of the C.P.R. eastern lines, has assumed his position as general superintendent of the West Superior division of the C.P.R., in place of F. P. Brady, who resigned."—Railway News and Commercial Traveller, Oct. 3.

There is no official named E. P. Gutchins in the C.P.R. service; there is no such position as "Engineer in chief of C.P.R. Eastern Lines," and there is no "West Superior division" on the C.P.R. By reference to our October issue it will be observed that "F. P. Gutelius, heretofore Assistant Chief Engineer Eastern Lines, Montreal, has been appointed General Superintendent Lake Superior Division."

> "Mr. J. M. McGreevy has been appointed assistant roadmaster for the Nelson section of District 3 of the C.P.R."—Canadian Engineer, Oct. 16.

J. M. McGreevy has been appointed Roadmaster, not Assistant Roadmaster, at Nelson, B.C.

> "John Mooney has been appointed assistant superintendent of motive power of the Grand Trunk Pacific, with office at Rivers, Man."—Railroad Age Gazette, Oct. 23.
>
> "Mr. John Mooney has been appointed assistant superintendent of motive power on the Grand Trunk Pacific, with headquarters at Rivers, Man."—Railway and Engineering Review, Oct. 24.

Our contemporaries have been misled by daily newspaper reports. J. Mooney has not been appointed Assistant Superintendent of Motive Power G.T.P.R., and he is not located at Rivers, Man. He has been appointed Road Foreman of Locomotives, with headquarters at Melville, Sask.

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MAINLY ABOUT PEOPLE.

R. Bickerdike returned to Montreal Oct. 18, after having spent the summer in Great Britain.

Lady Reid and Miss Reid arrived in Montreal Oct. 23, after having spent some time in Great Britain.

Capt. R. Pellatt, son of Sir Henry M. Pellatt, was married to Miss M. C. Perry, at Toronto, Oct. 13.

Lady Shaughnessy returned to Canada from England by the C.P.R. s.s. Empress of Britain, Oct. 22.

Hayter Reed, Manager-in-Chief C.P.R. hotels, has returned to Montreal from an inspection trip over the system.

F. McIsaac, of Sydney, N.S., employed on G.T. Pacific Ry. survey work, died at Kenora, Ont., Oct. 6, aged 26.

The eldest daughter of J. K. McNeillie, Superintendent District 1, C.P.R., Toronto, died at Toronto Oct. 11, aged 5½.

G. W. Stephens, Chairman Montreal Harbor Commissioners, sailed from New York, Oct. 6, on an extended visit to Europe.

W. Bishop, who died at New Hamburg, Ont., Oct. 20, aged 46, was a brother of W. E. Bishop, Manager of the Hamilton Steamboat Co.

A. A. Magee, who was until recently connected with the C.P.R. Law Department, has retired to engage in private practice in Montreal.

Miss A. Poole, daughter of W. S. Poole, Mechanical Superintendent P.E.I. Ry., was married in Vancouver, B.C., recently, to C. Bovyer.

C. R. Hosmer has been re-elected President, and Sir G. A. Drummond and Sir H. M. Allan directors, of the Ogilvie Flour Mills Co., for the current year.

Press reports say that F. H. Danforth, for two years Manager of the C.P.R. hotel, Banff, Alta., has gone to New York as Manager of the Prince George Hotel.

Z. G. Lash, son of Z. A. Lash, K.C., General Counsel for Mackenzie, Mann & Co., Ltd., Toronto, was married at Cayuga, Oct. 7, to Miss A. M. Upper.

W. Whyte, Second Vice-President C.P.R., will, press reports state, be given an official position in the Highland regiment recently organized at Winnipeg

J. M. Sutherland, on leaving the C.P.R. service, was presented with a gold chain and locket by his fellow-employes in the freight office at Fort William, Ont., Oct. 7.

F. Meighen, son of R. Meighen, director of the C.P.R., has been elected a director of the Lake of the Woods Milling Co., in place of the late Sir Robert G. Reid.

A. Laprairie, for many years master foreman at the G.T.R shops, Point St. Charles, Que., has retired from active service after 55 years with the company.

M. Frewen, of London, Eng., a director of the G.T. Pacific Ry., gave an address to the Canadian Club at Victoria, B.C., recently, in which he advocated bi-metallism.

Rear-Admiral Kingsmill, recently appointed in command of the Canadian cruiser fleet, has, at his own desire, been placed on the British navy retired list, as from Sept. 12.

Jas. Mackie, who died at Kingston, Ont., Sept. 29, aged 75, was for 44 years in the G.T.R. service, and for 14 years previous to his retiring in 1898 he was agent at Kingston Junction, Ont.

Miss L. Gibbons, daughter of G. C. Gibbons, K.C., chairman of the Canadian section of the International Waterways Commission, was married, Oct. 4, to G. H. R. Harris, at London, Ont.

M. Frewen, director G.T. Pacific Ry., who has been inspecting the local conditions and construction work in British Columbia, on behalf of English investors, left Vancouver for New York, via Seattle, Oct. 9.

Miss M. A. Bennett, eldest daughter of B. H. Bennett, General Agent, Chicago and Northwestern Ry., Toronto, is to be married there, Nov. 4, to Dr. A. B. Rankin, of Chicago, Ill., son of the Rev. Dr. Rankin, Toronto.

E. A. Crawley, engaged on the G.T. Pacific Ry.'s engineering staff, had one of his hands severely crushed in a velocipede, while engaged in inspecting construction on the line near St. Boniface, Man., Oct. 15.

D'Arcy Scott, Assistant Chief Railway Commissioner for Canada, and Mrs. Scott, were guests at the wedding of F. N. Waldie, President of the Victoria Harbor Lumber Co., to Miss Frances Heron, in Toronto, Oct. 13.

J. Oborne, General Superintendent Ontario Division, C.P.R., was married at Quebec, Oct. 22, to Miss E. N. Simpson, daughter of the late T. Simpson, at one time Chief Running Superintendent, Great Western Ry. of England.

J. P. Mabee, Chief Railway Commissioner, will be the principal guest at a dinner given by the Stratford, Ont., Board of Trade, Nov. 5. Mr. Mabee resided in Stratford for a portion of the time that he practised as a barrister.

Mrs. J. W. Cheesworth, who was found drowned near the Centre Island slip, Toronto, Oct. 14, was wife of J. W. Cheesworth, one of the provisional directors of the Lake Superior, Long Lake and Albany River Ry.

J. E. Griffiths, Golden, B.C., who superintended the construction of snow sheds on the C.P.R., at the Rogers Pass, is reported to have been asked to undertake the construction of similar sheds on the Trans-Andean Ry.

John Hendry was presented with a case of silver plate and a gold-headed cane by the employes of the Canada Car Co., Montreal, on leaving the company's service to become Master Car Builder of the G.T.R. at Montreal.

D. B. Hanna, Third Vice-President Canadian Northern Ry., Toronto, was one of the passengers on the first car to run into Milwaukee, Wis., over the Chicago and Milwaukee Electric Ry., of which he is one of the receivers.

E. J. Hebert, C.P.R. General Agent, Passenger Department, Montreal, sailed Oct. 3 on the C.P.R. s.s. Empress of Britain, on a trip to Great Britain and the European continent. He hopes to return about the end of December.

J. D. Oppe, who recently resigned the position of Manager of the Canadian Marconi Wireless Telegraph Co., sailed for England on the Allan Line s.s. Tunisian, Oct. 2. He expects to return to Canada about the middle of November.

A. Piers, jr., son of A. Piers, Manager C.P.R. steamship lines, has returned to business in the C.P.R. Vice-President's office, Montreal, having practically recovered from a recent gunshot wound in the leg, while with a hunting party.

F. P Gutelius was presented with a service of plate by the C.P.R. engineering staff, on giving up the position of Assistant Chief Engineer of the company's Eastern Lines, to become General Superintendent Lake Superior Division, C.P.R.

R. Nield, of Ipswich, Queensland, who is travelling round the world on a trip of inspection in the interests of an Australian railway commission, was in Stratford, Ont., recently, where an uncle, C. F. Nield, is engaged in the G.T.R. shops.

Chief Commissioner Mabee returned to Toronto, Oct. 4, from Port Rowan, his summer place on Lake Erie, where he had been for a few days after returning from his trip to Manitoba, etc. While in Winnipeg he fell and sprained his ankle.

H. Maxwell, educational instructor of apprentices in the locomotive department at the C.P.R. Angus shops, Montreal, was present at the second annual conference of the apprentice instructors of the New York Central Lines, held at Depew, N.Y., recently.

E. A. Mumford, who for a number of years was G.T.R. city freight agent at Montreal, was recently presented with a purse of gold by the freight staff of various railways in the city, upon his retirement from the service under the operation of the pension fund rules.

F. Sutherland, after 51 years with the G.T.R., latterly as master car builder at Montreal, has been retired under the company's pension scheme, and was recently presented with a gold watch, chain and locket, and a case of pipes, by the staff and employes.

Alex. McAuley, who died at West Toronto, Ont., Oct. 20, was for a number of years roadmaster on the C.P.R., at Havelock, Toronto Junction and Woodstock, Ont., and only retired from active work a short time ago, since when he has conducted a grocery business in West Toronto.

H. S. Folger, General Manager St. Lawrence River Steamboat Co., and Thousand Islands Steamboat Co., has been appointed U.S. Vice-Consul and Deputy Consul for Kingston, Ont., succeeding his father, the late M. H. Folger, who acted in that capacity for 34 years.

E. J. Coyle, who recently resigned the position of Assistant General Passenger Agent C.P.R., at Vancouver, B.C., was presented with a gold chain and locket by the staffs of the C.P.R. ticket offices at Vancouver, Victoria, Seattle, Tacoma and Portland, Oct. 2.

D'Arcy Scott, Assistant Chairman of the Board of Railway Commissioners, who was elected Mayor of Ottawa in Jan. last, will, it is understood, continue to act in that capacity during the remainder of the term, but will refrain from taking part in any matter concerning Ottawa which may come before the Board.

The body of E. G. Smith, an engineer's draughtsman, of Ottawa, was discovered in the Red River, at Winnipeg, Oct. 13. He had been engaged on G.T. Pacific Ry. construction work near Vermilion Bay, and had been in a local hospital for some time, and after leaving it against medical orders, spent some time in Winnipeg.

J. T. Arundel, who has been appointed General Superintendent Central Division, C.P.R., Winnipeg, entered C.P.R. service in 1886, since when he has been, to 1895, chief clerk mechanical department, and subsequently, assistant to General Master Mechanic, chief clerk to General Superintendent, Car Service Agent, acting Superintendent, and from 1902 to Oct. 8, Superintendent.

In a circular letter announcing the death of S. J. Ritchie, of Akron, Ohio, President of the Central Ontario Ry., the manager, G. Collins, on behalf of the company, says: "With deepest sorrow we announce the death of Mr. Samuel J. Ritchie, officially associated with this company for 28 years; his untiring energy, conscientious thoughtfulness and sterling qualities will always be thoughts for pleasant remembrance."

Mrs. Dunsmuir, widow of the late R. Dunsmuir, and mother of the Hon. J. Duns-

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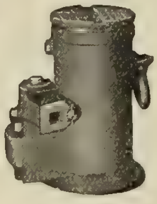

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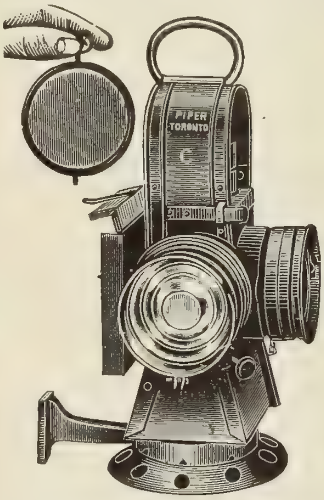

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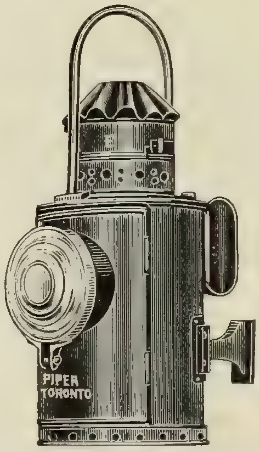

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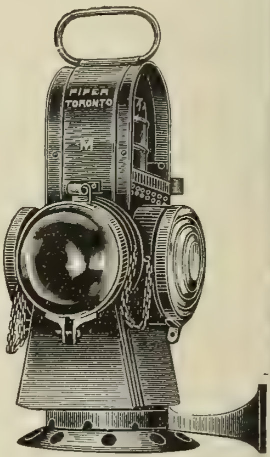

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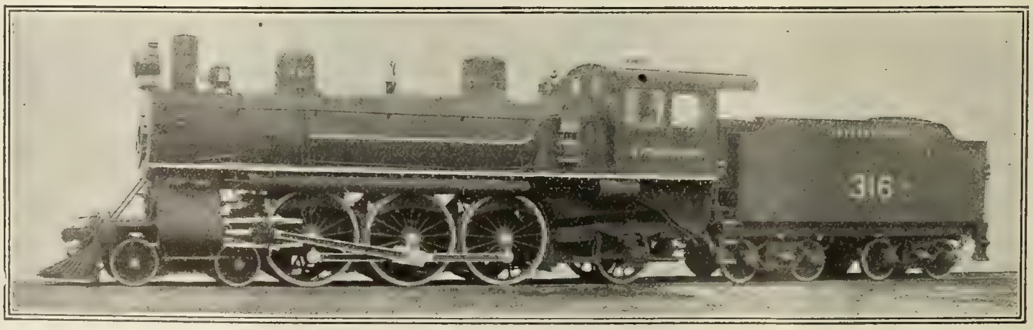

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muir, Lieutenant-Governor of British Columbia, died at Victoria, B.C., Oct. 2, aged 80. She was at the time of her death engaged in a lawsuit with her son respecting the Dunsmuir property, which included the Wellington Collieries and railway connected therewith, and at one time the Esquimalt and Nanaimo Ry., now owned by the C.P.R.

A. E. Welby, who has recently been elected First Vice-President Denver, Laramie and Northwestern Rd., was, prior to entering U.S. railway service in 1881, from 1872, connected in various capacities with the Great Western Ry. of Canada, first as rodman, and subsequently in the operating department. He was later on the staff of the Chief Engineer, Canada Southern Ry., now part of the M.C. Rd., and in 1877 freight clerk G.T.R., and in 1879 clerk to Superintendent same road.

J. M. Rosevear, whose appointment as Auditor of Disbursements, G.T.R., was announced in our Oct. issue, was born at St. Lambert, Que., Aug. 9, 1869, and entered G.T.R. service Sept. 1, 1897, since when he has been to Aug. 31, 1903, clerk General Auditor's office, Montreal; Sept. 1, 1903, to April 19, 1906, travelling auditor of disbursements; April 20, 1906, to Dec. 31, 1907, chief clerk of expenditure, Auditor of Disbursements' office, Montreal; Jan. 1, to Aug. 31, 1908, chief clerk General Auditor's office, Montreal

J. M. R. Fairbairn, who has been appointed Principal Assistant Engineer C.P.R. Eastern Lines, Montreal, was born at Peterboro, Ont., June 30, 1873. He graduated from the School of Practical Science, Toronto, in 1893, and subsequently, until Aug., 1901, worked on surveys and construction work, since when he has been, to Nov., 1902, Assistant Engineer Maintenance Department, C.P.R. Eastern Lines; Nov., 1902, to Aug., 1904, Resident Engineer C.P.R., district 4, Ottawa; Aug., 1904, to Aug., 1905, Assistant Engineer, Chief Engineer's Office, Montreal; Aug., 1905, to Mar., 1906, acting Division Engineer, Eastern Division, Montreal; Mar., 1906, to Nov., 1907, Division Engineer, Ontario Division, Toronto; Nov., 1907, to Oct., 1908, Division Engineer, Eastern Division, Montreal.

W. Bell, whose appointment as Assistant General Superintendent of Sleeping, Dining and Parlor Car Service, districts 3, 4 and 5, C.P.R. Western Lines, was announced in our Oct. issue, was born in Toronto Sept. 17, 1875, and entered C.P.R. service in Mar., 1887, as office boy in the President's office, Montreal. He was transferred in June, 1895, to the General Superintendent's office, Eastern Division, Montreal, since when he has been, to July, 1897, private secretary to General Superintendent; July, 1897, to July, 1898, clerk, Sleeping, Dining and Parlor Car Department; July, 1898, to June, 1901, Inspector; June, 1901, to March, 1903, Chief Inspector; Mar., 1903, to May, 1906, District Superintendent; May, 1906, to Sept. 1, 1908, Assistant Superintendent, same department.

F. H. Clendenning, whose appointment as City Freight Agent C.P.R., Victoria, B.C., and District Freight Agent Esquimalt and Nanaimo Ry., was announced in our Oct. issue, entered C.P.R. service Aug. 1, 1898, since when he has been to 1900, junior clerk; 1900 to 1902, register clerk Freight Traffic Manager's office, Montreal, under G. M. Bosworth, now Fourth Vice-President; to July, 1902, stenographer, Fourth Vice-President's office; July 1, 1902, to Apr. 1, 1903, stenographer and freight clerk, Commercial Agent's office, New York Central and Hudson River Rd., Montreal; April 1, 1903, to Feb. 1, 1904, stenographer and subsequently tracing clerk, C.P.R. General Freight Agent's office, Vancouver, B.C.; Feb. 1, 1904, to Sept. 1, 1908, Contracting Freight Agent, Victoria, B.C., same road.

A. E. Duff, whose additional appointment as District Passenger Agent G.T. Pacific Ry. lines west of Lake Superior, was announced in our Oct. issue, was born at Sherbrooke, Que., May 1, 1872, his record of railway service being: Winter, 1887, shovelling snow on section at Danby, Que.; summer of 1888, water boy on train between Richmond and Montreal, Que.; Feb., 1889, to Aug., 1889, switchman at St. Bruno, Que.; Aug., 1889, to April, 1890, switchman, St. Isidore Jct., Que.; April, 1890, to Aug., 1890, night telegraph operator, Upton, Que.; Aug., 1890, to Aug., 1892, night telegraph operator, Actonvale, Que.; Aug., 1892, to May, 1895, night telegraph operator, South Durham, Que.; June, 1895, to Mar., 1898, agent, Belœil, Que.; Mar., 1898, to Oct., 1901, agent, North Stratford, N.H.; Oct., 1901, to Aug., 1904, agent, St. Lambert, Que.; Aug., 1904, to Jan., 1907, Travelling Passenger Agent, Montreal; from Jan., 1907, General Agent Passenger Department, Winnipeg, which position he still retains. Entire service with G.T.R.

R. R. Jamieson, who has retired from railway service to become President of the Merchants Fire Insurance Co., and who has also become interested in other insurance companies, Calgary, Alta., was born at Westover, Ont., Dec. 12, 1856, and entered railway service 1873, his record being: 1873 to 1874, telegraph operator Great Western Ry.; 1874 to 1878, telegraph operator G.T.R.; 1878 to 1880, on construction in Indiana with the Delphi and Chicago Ry.; 1880 to 1883, agent and train despatcher Credit Valley Ry.; 1883 to 1884, on construction C.P.R. in the Northwest Territories; 1884 to 1890, train dispatcher C.P.R., Toronto; 1890 to 1892, Assistant Superintendent C.P.R., Toronto; 1892 to 1896, Assistant Superintendent C.P.R., Smith's Falls, Ont.; 1896 to 1902, Superintendent C.P.R., Farnham, Que.; 1902 to 1903, Superintendent C.P.R., Cranbrook, B.C.; 1903 to Dec., 1907, General Superintendent C.P.R., Calgary, Alta.; Dec., 1907, to Oct. 5, 1908, General Superintendent, C.P.R., Central Division, Winnipeg.

G. J. Bury, General Manager C.P.R. Western Lines, whose portrait appears on the first page of this issue, was born at Montreal, Mar. 6, 1866, and was educated at Montreal College. He entered railway service on the C.P.R. 1883, since when his record has been: 1883 to 1887, clerk in Purchasing Department and in General Manager's office; 1887 to 1889, secretary to Vice-President, afterwards President; 1889 to Mar., 1890, acting superintendent dining, sleeping and parlor car service; 1890 to Sept., 1899, successively, Assistant Superintendent at Chalk River, Ont., and Superintendent North Bay, Ont.; Sept., 1899, to Feb., 1901, Superintendent Fort William, Ont.; Feb., 1901, to Feb., 1902, Superintendent Crow's Nest Pass Line, Cranbrook, B.C.; Feb. to May, 1902, Assistant General Superintendent Lake Superior Division, North Bay, Ont.; May, 1902, to 1905, General Superintendent same division; 1905 to Feb. 1907, General Superintendent Central Division, Winnipeg; Feb., 1907, to Mar. 1, 1908, Assistant General Manager, Western Lines.

J. D. Morton, Chief Accountant Canadian Northern Ry., whose additional appointment as General Auditor of C.N.R. constituent companies in Nova Scotia, Quebec and Ontario, was announced in our Oct. issue, was born in London, Ont., June 15, 1857. His record is as follows: 1871 to Mar., 1873, messenger Montreal Telegraph Co.; Mar., 1873, to Nov., 1879, operator, Great Western Ry. of Canada; Nov., 1879, to Feb., 1881, ticket agent, same road; Feb., 1881, to Nov., 1881, station agent, same road; Jan., 1882, to Nov., 1882, mechanical clerk Des Moines and Fort Dodge Ry.; Nov., 1882, to Aug., 1883, Stores Department, C.P.R., Winnipeg; Aug., 1883, to Jan., 1885, General Storekeeper, Manitoba and North-Western Ry., Winnipeg; Jan., 1885, to Sept., 1886, Cashier and Paymaster, same road; Sept., 1886, to Nov., 1886, Accountant, same road; Nov., 1886, to Nov., 1893, chief clerk, General Manager's office, same road; Nov., 1893, to June, 1899, was spent in commercial accounting in Winnipeg; July, 1899, to April, 1902, accountant on construction, Ontario and Rainy River Ry.; May, 1902, to Dec., 1906, accountant on construction, Halifax and Southwestern Ry.; and from Dec., 1906, Chief Accountant, Canadian Northern Ry., Toronto.

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TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Canadian Westinghouse Co., Ltd., has issued circular 1138, describing type EM direct current motors with constant, varying and adjustable speeds. A pamphlet is also issued by the same company, with full descriptions, well illustrated, of Baldwin-Westinghouse electric locomotives, a product of joint experience of the Baldwin Locomotive Works, Philadelphia, Pa., and the Canadian Westinghouse Co., Hamilton, Ont.

The Rail Joint Co. advises us that notwithstanding the depression during the past twelve months, it has been able to maintain its business without deterioration. Its products include base supporting rail joints for standard tee rail sections, and girder sections, also insulating joints to meet various conditions for track use at terminals and for signal work. The company's output to steam and electric railways throughout the world during the past 14 years exceeds 50,000 miles, this mileage being equal to a double track railway round the world.

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The C.P.R. and Government Subsidies.—Speaking at the dinner tendered him by the Victoria, B.C., Board of Trade, Oct. 22, Sir Thos. G. Shaughnessy, President C.P.R., said: "We do not care about Government subventions. I am free to say that we would be delighted to forego everything in the nature of a Government grant if that was adopted as a policy of the Government, but, of course, we would not want to see other railway undertakings receive such consideration while we were ignored. We would be very pleased to carry out any of these works, which we believe to be in the public interest, as well as in the interest of the C.P.R., without anything in the nature of Government assistance, if the practice of giving that assistance was discontinued by both the Dominion and the Provincial Governments."

During July and Aug., 32 employes were killed and 7 injured in the course of their employment in Canadian navigation. Of the fatalities, 21 were due to drowning, 5 to falls, 2 each to fires and to explosions, and one each to being struck by cars and to falling material; of the non-fatal accidents, 3 were due to falls, 2 to boiler explosions, and 1 each to falling material and to sunstroke.

W. S. CALVERT, President *T. H. HAMILTON, General Manager*

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READ "REACTIONS"

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THE Quarterly Publication "REACTIONS" will be mailed free of charge to anybody in the United States, Canada or Mexico. The Third Quarter of this paper contains a number of very interesting articles and is profusely illustrated. Subjects treated of are the following: Welding Locomotive Frames and Driving Wheel Spokes, A New Development in Rail Welding, New Thermit Reactions, Welding Two Large Anchors, Quick Repair to a Rudder Frame, Welding Propeller Strut of German Warship, Hard Spots in Steel Castings and Improving Cast Iron.

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TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Canadian Pacific Ry.—G. L. Wetmore, heretofore Division Engineer Lake Superior Division, North Bay, Ont., has been appointed Division Engineer Atlantic Division, St. John, N.B., succeeding C. B. Brown, transferred.

C. T. Ridalls, heretofore in the Angus shops, Montreal, has been appointed Car Foreman at McAdam Jct., N.B.

J. M. R. Fairbairn, heretofore Division Engineer Eastern Division, Montreal, has been appointed Principal Assistant Engineer Eastern Lines. Office, Montreal.

C. B. Brown, heretofore Division Engineer Atlantic Division, St. John, N.B., has been appointed Division Engineer Eastern Division. Office, Montreal.

W. Nicholson has been appointed foreman blacksmith Angus shops, Montreal, succeeding J. Fenwick, deceased.

Ewart, Scott, Maclaren and Kelley have been appointed the company's local solicitors at Ottawa, in succession to D'Arcy Scott, appointed Assistant Chief Railway Commissioner. G. D. Kelley, who has recently joined Mr. Ewart's firm, was in partnership with Mr. Scott up to the latter's appointment on the Commission.

R. J. Hunt, heretofore chief clerk Tariff Bureau, Montreal, has been appointed Chief of Tariff Bureau, Eastern Lines, Montreal, succeeding F. H. Cogswell, resigned.

D. Carmichael, heretofore Trainmaster, has been appointed Assistant Superintendent district 1, Ontario Division. Headquarters, Havelock, Ont.

V. A. Harshaw, heretofore Trainmaster, has been appointed Assistant Superintendent district 3, Ontario Division. Headquarters, West Toronto.

W. Coulter, heretofore Local Freight Agent, Toronto, has been appointed Terminal Agent, Toronto, with jurisdiction over stations and yards in the Toronto terminals.

Albion Maynes, heretofore Road Foreman Locomotives, district 1, Ontario Division, has been appointed District Master Mechanic, same district. Office, West Toronto, Ont.

J. R. Spragge, heretofore Road Foreman Locomotives, district 3, Ontario Division, has been appointed District Master Mechanic, same district. Office, West Toronto, Ont.

L. G. Roblin, heretofore Road Foreman Locomotives, district 2, Ontario Division, has been appointed District Master Mechanic, same district. Office, London, Ont.

Frank Taylor, heretofore Assistant Engineer Eastern Lines, Montreal, has been appointed Division Engineer, Lake Superior Division. Office, North Bay, Ont.

Gates Reid, heretofore District Master Mechanic North Bay, Ont., has been appointed Master Mechanic Lake Superior Division, vice C. A. Stark. Office, North Bay.

F. T. Grant has been appointed Travelling Passenger Agent, Syracuse, N.Y., vice D. H. Morse, resigned.

J. T. Arundel, heretofore Superintendent district 2, Pacific Division, Vancouver, B.C., has been appointed General Superintendent Central Division, succeeding R. R. Jamieson, resigned. Office, Winnipeg.

C. E. Stockdill has been appointed chief clerk Second Vice-President's general office, Winnipeg, vice J. F. Kane, promoted.

H. M. MacCallum, heretofore Travelling Passenger Agent Atlantic Steamship Lines, has been appointed General Agent C.P. Steamship Lines, Atlantic service, with headquarters at 217 McDermot Ave., Winnipeg. Space for all C.P. Atlantic sailings will be held in his office. Agents, Port Arthur and west, will make applications for reservations, tariffs, etc., to his office.

J. F. Kane, heretofore chief clerk Second Vice-President's office, Winnipeg, is reported to have been appointed Fuel Agent Western Lines, with office at Calgary, Alta., vice W. B. Harris, transferred.

A. McArthur has been appointed Locomotive Foreman at Moose Jaw, Sask.

A. N. Hobkirk, heretofore District Master Mechanic, Cranbrook, B.C., has been appointed Trainmaster district 2, Western Division, succeeding J. A. Kennedy, transferred. Office, Medicine Hat, Alta.

T. Bate has been appointed General Foreman at Calgary, Alta.

E. L. Chudleigh, heretofore Trainmaster at Cranbrook, B.C., has been transferred to Macleod, Alta., with jurisdiction over the Crow's Nest section and the Macleod branch.

E. L. Chudleigh, Trainmaster Macleod, Alta., has been appointed acting Superintendent district 4, Western Division, Cranbrook, B.C., during the absence on leave of J. Brownlee.

A. T. Shortt, heretofore general foreman Calgary, Alta., has been appointed District Master Mechanic, Cranbrook, B.C., succeeding A. N. Hobkirk, transferred.

J. A. Kennedy, heretofore Trainmaster district 2, Western Division, Medicine Hat, Alta., has been transferred to Cranbrook, B.C., with jurisdiction over the Cranbrook section, including Crow's Nest terminal, Sirdar section, and the Kimberley and Curzon branches.

J. McGreevy has been appointed Roadmaster C.P.R., Nelson, B.C., succeeding H. Beck, assigned to other duties.

T. Nicholls has been appointed Roadmaster, Eholt, B.C., vice E. L. Franson, assigned to other duties.

W. O. Miller, heretofore Car Service Agent, Vancouver, B.C., has been appointed Superintendent district 2, Pacific Division, vice J. T. Arundel, promoted. Office, Vancouver, B.C.

W. B. Harris, heretofore Fuel Agent Western Lines, Calgary, Alta., has been appointed Car Service Agent, Vancouver, B.C., vice W. O. Miller.

In connection with the appointment of F. H. Clendenning as City Freight Agent, Victoria, B.C., and as District Freight Agent Esquimalt and Nanaimo Ry., as announced in our Oct. issue, we are advised that owing to the resignation of G. L. Courtney, who was District Freight and Passenger Agent of the C.P.R. and the E. & N. R., the passenger and freight departments have been separated, F. H. Clendenning coming under the jurisdiction of W. R. Haldane, General Freight Agent, Vancouver. L. D. Chetham, who has been City Passenger Ticket Agent at Victoria for some years, has also been appointed District Passenger Agent E. & N.R.

Esquimalt and Nanaimo Ry.—See C.P.R.

Grand Trunk Pacific Ry.—J. Mooney, heretofore Road Foreman of Locomotives, G.T.R., has been appointed in a similar capacity G.T.P.R. Headquarters, Melville, Sask.

The position of Trainmaster at Melville, Sask., hitherto occupied by C. D. Fisher, is reported to have been abolished.

B. L. McDermid is reported to have been appointed Chief Train Dispatcher at Melville, Sask., vice —. Cauthers, resigned.

A. Watts is reported to have been appointed Locomotive Foreman at Melville, Sask., vice F. H. Wilson, resigned.

A. R. Armstrong is reported to have been appointed chief clerk to Superintendent at Melville, Sask.

Grand Trunk Ry.—John Hendry, heretofore in the Canada Car Co.'s service at Montreal, has been appointed Master Car Builder, Eastern Division, G.T.R., vice F. Sutherland, retired under the provisions of the pension rules after 51 years' service. Office, Montreal.

F. McCraw, heretofore passenger yardmaster, Toronto, has been appointed Assistant Claims Agent, Toronto, vice N. Walton.

L. Ivey has been appointed passenger yard master, Toronto, vice F. McCraw, promoted.

R. H. Fish has been appointed acting Road Foreman of Locomotives, vice J. Mooney, resigned to accept service with G.T.P.R. Headquarters, Sarnia, Ont.

The following agents have been appointed: Findley (Freight), Ont., P. Fox; Omemee Jct., Ont., S. Blatherwick; Uhthoff, Ont., M. M. Weir; Woodville, Ont., S. McPhaden; Washago, Ont., A. H. Nixon; Emsdale, Ont., A. M. Clarke; Lisle, Ont., H. F. Parks; Sundridge, Ont., T. A. Wickett; Wyevale, Ont., N. Ritchie; Ethel, Ont., J. A. Scott; Algonquin Park, Ont., W. H. Armour; Rainy Lake, Ont., W. F. Ferguson; Otter Lake, Ont., E. P. Brinton. Leamington, Ont., H. O. Daykin, Outside Agent.

Michigan Central Rd.—F. O. Waldo, heretofore Assistant Auditor, has been appointed Auditor, vice A. J. Burt, deceased. Office, Detroit, Mich.

New York Central and Hudson River Rd.—E. J. Richard, heretofore Chief Assistant General Passenger Agent, has resigned on account of ill-health after over 50 years' service, and hereafter will perform such duties as may be assigned to him by the General Passenger Agent. It is said the position of Chief Assistant General Passenger Agent has been abolished.

F. J. Wolfe, heretofore Assistant General Passenger Agent, has, at his own request, been relieved of his duties on account of ill-health, and will hereafter perform such duties as may be assigned to him by the General Passenger Agent. It is said the position of Assistant General Passenger Agent has been abolished.

New York Central Lines.—F. C. Foy, heretofore Ticket Agent, Toronto, has been appointed Canadian Passenger Agent, vice L. Drago, transferred. Office, Toronto.

L. Drago, heretofore Canadian Passenger Agent, Toronto, has been appointed in charge of the Union Ticket Office at Clifton Hotel, Niagara Falls, Ont.

Pere Marquette-Lackawanna Fast Freight Line.—G. P. Hood has been appointed agent, with office at Grand Rapids, Mich.

Pere Marquette Rd.—C. H. Walters has been appointed Travelling Freight Agent, reporting to the Commercial Agent, Toledo, O.

Wabash Railroad.—E. H. B. Cull, Contracting Agent at Detroit, has been appointed Division Freight Agent there, succeeding C. C. Landers, transferred.

C. C. Landers, heretofore Division Freight Agent, Detroit, has been appointed Division Freight and Passenger Agent at Danville, Ill.

W. H. Wylie, heretofore Commercial Agent, St. Louis, Mo., has been appointed Assistant General Freight Agent, vice R. N. Collyer, resigned to become a member of the Uniform Classification Committee, Chicago, Ill. Office, St. Louis, Mo.

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The G.T.R. announces the completion of the electrification of its St. Clair Tunnel between Sarnia, Ont., and Port Huron, Mich., which it states is one of the longest submarine tunnels in the universe, and that its electrification is one of the most important events in the electrical world, costing over $500,000. An official party with a number of invited guests will inspect the electrical plant, equipment and appliances on Nov. 12.

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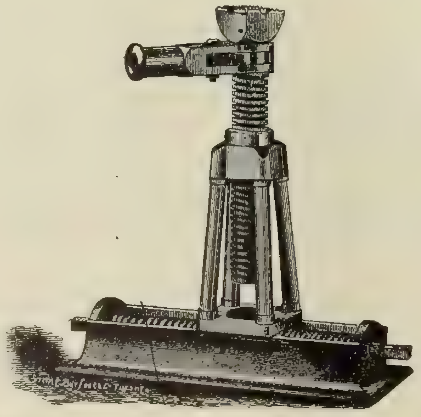

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National Transcontinental Railway.

The Commissioners have filed plans and books of reference for extra land required in the County of Portneuf, Que., as follows: For additional station ground at St. Casimir, situated at mileage 45 west from Quebec bridge, and for a diversion of the public road at mileage 19 west from Quebec bridge.

Reports from Abitibi, Ont., state that the bridge being constructed across the river there is 840 ft. long, and 94 ft. above the water level. The construction of the line has been pushed forward to such an extent that it is expected to have track laid from the river crossing, seven miles east of Cochrane, the junction with the Temiskaming and Northern Ontario Ry., and Frederick House, by Christmas.

On the line easterly from St. Boniface, Man., G. A. Wade, Track Inspector, reported, Oct. 8, that the track was finally ballasted to First Broken Head, about 32 miles; two lifts of ballast had been laid on the eight miles thence to Second Broken Head, and one lift between that point and Rennie, an additional 17 miles. Steel was laid from Rennie to Green Lake, 13 miles. A later report stated track had been laid to 25 miles east of Rennie and that it was expected to have a further 30 miles laid by the end of the year. It is also expected to lay track on about 50 miles from Lake Superior Junction westerly by the end of the year.

The contract for the construction of tank, boiler and erecting shops, in Springfield municipality, 6 miles east of Winnipeg, has been awarded to T. Kelly & Sons, Winnipeg. The price is stated to be about $500,000. On this page we give a map showing the location of the shops and yards, and a ground plan of the shops, with the proposed track layout is given on page 813.

GRAND TRUNK PACIFIC RY.

It is expected that the branch line connecting Fort William with the National Transcontinental Ry., at Lake Superior Junction, Ont., will be completed by Nov. 30. G. Knowlton, Divisional Engineer, stated, Oct. 7, that there were 30 miles of steel to be laid, but as several bridges have to be completed the work of tracklaying is being delayed. The other work on the line is well forward and everything is being pushed with the object of getting the branch finished by the date mentioned. The bridge over the river at Fort William, except for the finishing touches and the approaches, was reported to be completed Oct. 15. The steel work was erected by the Canadian Bridge Co., Walkerville, Ont.

The official returns for the inspection of grain at Winnipeg, issued Oct. 3, credited the G.T.P.R. with having brought 13 carloads of wheat into the city. Previous shipments of grain coming from points on the G.T.P.R. had been brought into Winnipeg over the Canadian Northern Ry. from Portage la Prairie. The service given on the line is three trains a week between Winnipeg and Waterous, Sask., 408 miles, and two trains a week between Waterous and Wainwright, 258 miles. On this stretch of line there are 97 stations. During his recent inspection of the line the President, C. M. Hays, said it was expected that the line would be completely ballasted east of Saskatoon early in Oct. A proposition had been made by the Canadian Northern Ry. for the construction of joint terminals there, but nothing in the way of an agreement had been reached. The construction of the bridge across the Battle River is expected to be completed early in Nov. The bridge has a total length of 2,772 ft., and the centre spans are 160 ft. above the concrete piers. The superstructure is carried on 53 piers. As soon as the bridge is completed, track will be laid across it and tracklaying will be resumed on the roadbed west of the Battle River and pushed forward towards Edmonton. The bridge over the Saskatchewan River at Clover Bar is also expected to be completed early in Nov. It is expected that track will be laid into Edmonton by the end of the year. C. Schreiber, consulting engineer to the Department of Railways, who returned to Ottawa Sept. 28, after an inspection of the line, said the new railway will be in full operation from Winnipeg to Edmonton by Jan. 1, 1909. A joint station with the Canadian Northern Ry. at Edmonton will, it is understood, be constructed. Between Edmonton and Wolf Creek, Alta., a distance of 127 miles, the grading is well advanced, and it is expected that the grading gangs will be within 10 miles of Wolf Creek by the end of the year. Tracklaying will be started from Edmonton westerly, Dec. 1, and will be continued to Pembina River, a distance of 65 miles. At this point a large bridge is under construction, the foundations of which it is hoped to complete by Feb. 1. The steel work for this bridge will then be completed and tracklaying pushed westward. The contract for the substructure of the bridge across Wolf Creek is expected to be let at an early date.

The company will call for tenders for the construction of 200 miles from Wolf Creek westerly at an early date, which will bring the mileage under contract well into British Columbia. Final arrangements for the route over the inner table land have not yet been made, but it is understood that this matter was discussed between the British Columbia Government and C. M. Hays, President G.T.P.R., during the latter's visit to Victoria, Oct. 14.

Mr. Hays returned to Vancouver, B.C., from Prince Rupert, Oct. 13. He said he had been up the Skeena River as far as its confluence with the Copper River, making an inspection of the construction going on there. He was very well pleased with the progress made by the contractors, and announced that tenders would be asked at an early date for the construction of a further 100 miles easterly from Prince Rupert.

C. C. Van Arsdol, Division Engineer, who formerly had his headquarters at Edmonton, Alta., and is now located at Prince Rupert, B.C., has jurisdiction over construction from that point to the McLeod River. R. W. Jones, Division Engineer, who has transferred his staff from Saskatoon to Edmonton, closing the Saskatoon office, has had his jurisdiction extended westerly to the McLeod River.

The Toronto Globe's Ottawa correspondent wired, Oct. 20, that the G.T.P.R. proposes to construct what will be practically a second line of railway stretching right across the prairie provinces. The route as projected will start from the present main line north of Brandon, run to that city, thence west across Saskatchewan, and into the coal districts of Southern Alberta. We are advised that this is no new proposition. Probably the report has reference to some of the various branches contemplated to act as feeders to the main line and which were shown on the map we issued as a supplement in Nov., 1907.

In an interview at Victoria, B.C., Oct. 14, Mr. Hays said the company eventually intended to have a branch southerly into that city, where a water frontage had already been secured. This water frontage, local reports state, was acquired at a cost of $150,000. There were, said Mr. Hays, some details of the project to be worked out, but it was desired that the line, when constructed, would run the entire length of Vancouver Island. The general plans of the company show such a line and also a line from Vancouver, connecting with the main line at Fort George, B.C.

The company has placed an order for 15,752 tons of steel rails with the Algoma Steel Co., Sault Ste. Marie, Ont., and another for 28,695 tons with the Dominion Iron and Steel Co., Sydney, N.S. (Oct., pg. 725).

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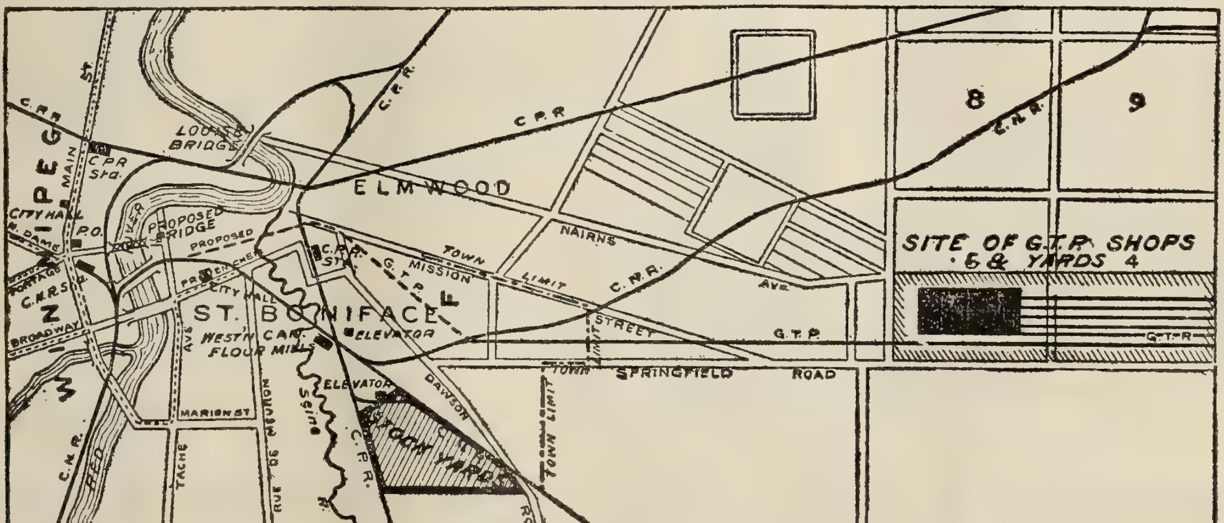
D. B. Hanna, Third Vice-President Canadian Northern Railway, expects to leave Toronto on a trip to Great Britain early in November.



MAP SHOWING SITE OF SHOPS TO BE ERECTED BY THE NATIONAL TRANSCONTINENTAL RY. COMMISSION NEAR WINNIPEG.

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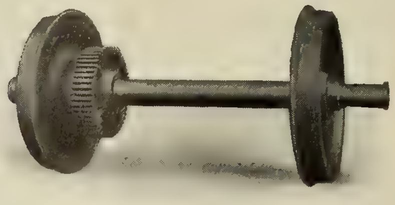

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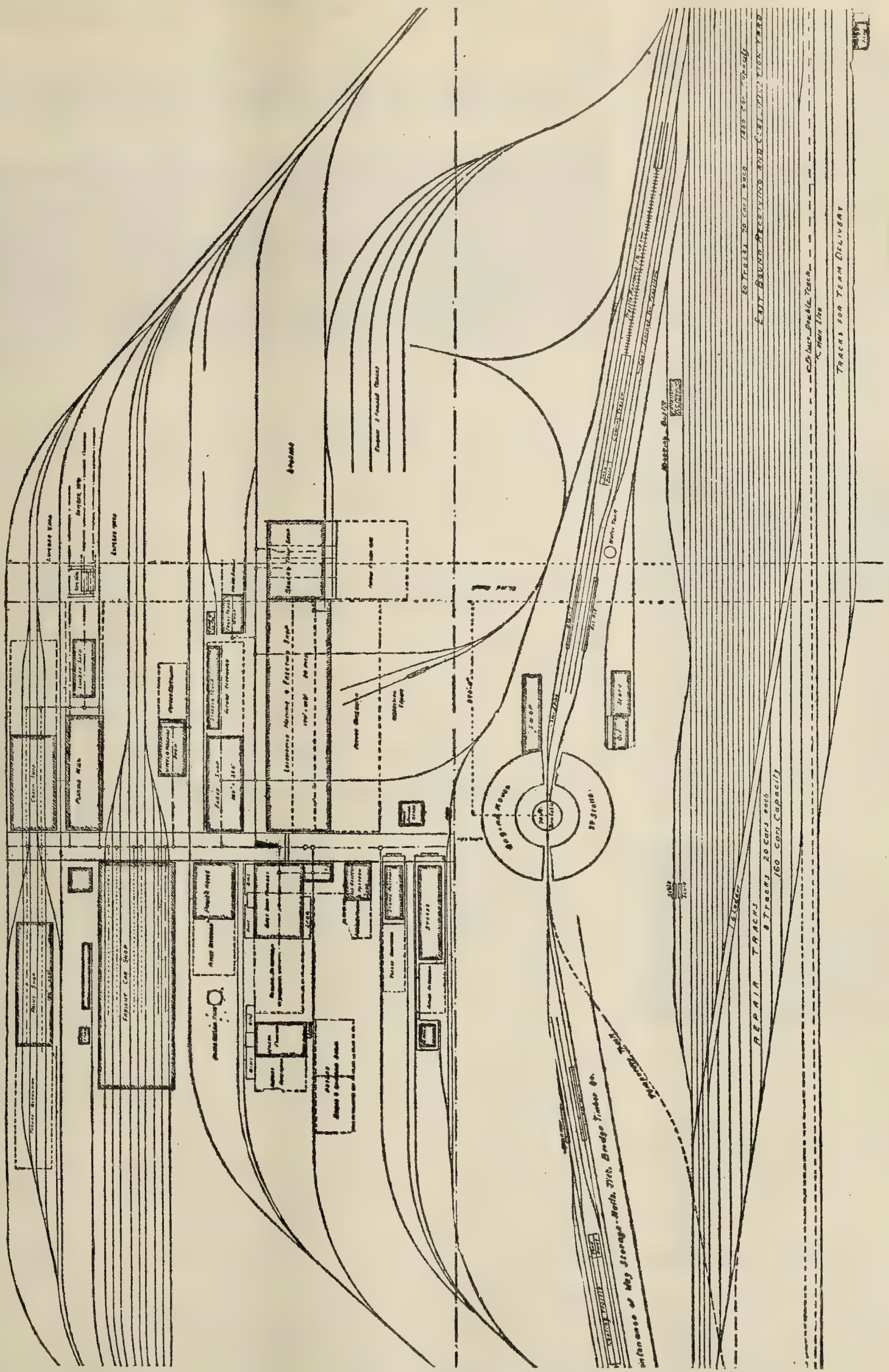

GROUND PLAN OF NATIONAL TRANSCONTINENTAL RAILWAY SHOPS AND YARDS NEAR WINNIPEG.

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The country between Parry Sound and Sudbury, traversed by the CANADIAN NORTHERN ONTARIO RAILWAY, is a land of lonely muskeg and brulé, the native country of the white-tailed deer. From Sudbury north to Sellwood this same line goes in through a moose hunting territory unequalled in Ontario.

The CANADIAN NORTHERN QUEBEC and QUEBEC AND LAKE ST. JOHN RAILWAYS span the native country of the ouananiche, northern brook trout, and the spruce-shored lakes of the Roberval country, where moose and caribou abound.

The eastern shore of Nova Scotia, from Yarmouth to Halifax, is served by the HALIFAX AND SOUTH WESTERN RAILWAY. On the barrens, slightly inland from the railway, are some of the best places for big moose in the east.

THE CANADIAN NORTHERN RAILWAY from Port Arthur to Edmonton, with many branches, griddles almost undisturbed haunts of moose, caribou, deer, wolves, bear, and all species of four-footed and feathered game.

For Information, General and Special, Address the Information Bureau, Canadian Northern Railway, Toronto

Railway Rolling Stock Notes.

The C.N.R. between Sept. 15 and Oct. 15 received 3 sleeping cars, a description of which appeared in our July issue.

The G.T. Pacific Ry. received the following additions to rolling stock to Oct. 16: 6 baggage cars, 800 box cars, and 6 locomotives.

The G.T. Pacific Ry. between Sept. 14 and Oct. 15 received six 8-wheeled locomotives from the Canada Foundry Co., Toronto.

The C.P.R. between Sept. 19 and Oct. 14 received the following additions to rolling stock: 1 sleeping car, 4 colonist cars, 276 box cars, 17 flat cars, 1 flanger, from its Angus, Montreal, shops; 9 vans from its Farnham, Que., shops, and 11 locomotives from the Montreal Locomotive Works.

The C.P.R. between Sept. 19 and Oct. 14 ordered the following rolling stock: 1 tourist car, 1 mail and express car, 1 baggage car, 40 box cars, 20 flat cars, 2 stock cars, 7 Hart ballast cars, from its Angus, Montreal, shops; 22 vans from its Farnham, Que., shops, and 500 box cars from the Dominion Car and Foundry Co., Montreal.

The Canada Car Co., Montreal, between May 14 and Oct. 18, received orders for the following rolling stock: 2,200 box cars, 100 stock cars, 100 refrigerator cars, 5 colonist cars and 5 tourist cars, from the G.T. Pacific Ry.; 7 flat cars from F. H. Hopkins & Co., Montreal; and 20 Hart-Otis ballast cars, and one spreader car, from the Hart-Otis Car Co., Montreal.

The Intercolonial Ry. during Sept. received the following additions to rolling stock: 5 consolidation locomotives, from the Canadian Locomotive Co., Kingston, Ont.; 1 box car, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.; 7 box cars, 60,000 lbs. capacity, from Rhodes, Curry & Co., Ltd., Amherst, N.S., and 47 box cars, 60,000 lbs. capacity, from other sources.

Notice is given that there has been deposited in the office of the Secretary of State of Canada, an original agreement and contract of conditional sale of certain locomotives, dated May 1, 1908, between the Montreal Locomotive Works, Ltd., and the Canadian Northern Ry. Co., also an agreement and contract of conditional sale dated April 1, 1908, between the Montreal Locomotive Works, Ltd., and the Toronto, Hamilton and Buffalo Ry. Co.

The G.T.R. has placed an order with the Canadian Locomotive Co., Kingston, Ont., for 25 locomotives, for delivery early in 1909. Following are chief particulars:

Cylinders	20″ by 26″
Driving wheels, diar	63″
Boiler, diar	62″
Firebox	120″ by 40⅛″
Tubes	271—2″
Driving wheel base of engine	15′ 8″
Total wheel base of engine	24′ 3″
Total wheel base of engine and tender	51′ 1″
Weight on drivers	138,000 lbs.
" truck	24,000 lbs.
Total weight of engine	162,000 lbs.
" " tender, loaded	143,000 lbs.

The Dominion Coal Co. has ordered a 6-wheeled locomotive from the Montreal Locomotive Works, for delivery in March, 1909. Following are the chief particulars:

Cylinders	19″ by 26″
Boiler	straight top, radial stay
Firebox	102″ by 33″
Tubes	259–2″ by 11′ long
Driving wheel base	11′ 6″
Engine wheel base	11′ 6″
Engine and tender wheel base	37′ 5½″
Weight on drivers	122,000 lbs.
Total weight	122,000 lbs.
Weight of tender	68,000 lbs.
Water capacity	3,000 U.S. gals.
Coal capacity	4 tons

The C.P.R. has ordered 10 ten-wheel locomotives (4-6-0) from the Montreal Locomotive Works, for immediate delivery. Following are the chief particulars:

Weight on engine trucks	48,000 lbs.
Weight on drivers	142,000 lbs.
Weight, total	190,000 lbs.
Driving wheel base	14′ 10″
Total wheel base, engine	26′ 1″
Total wheel base, engine and tender	54′ 6½″
Cylinders	22½″ by 28″
Valves, piston	11″ diar.
Drivers, diar	63″
Driving journals	main 9½″, others 12″
Valve gear	Walschaert
Superheater	Vaughan-Horsey
Boiler, type	extended wagon top, radial stay
Working pressure	180 lbs.
Firebox	102⅛″ by 69⅞″
Tubes, no. and diar	240–2″, 24–5″
Tubes, length	14′ 4″
Tank capacity	5,000 imp. gals.
Coal capacity	10 tons
Air brakes	Westinghouse
Brake beams	Simplex
Couplers	Tower

Alberta Ry. and Irrigation Company.

A paragraph in the C.P.R. annual report stated that the directors had arranged to "secure such an interest" in the Alberta Ry. and Irrigation Co., "as will constitute a substantial control," at an approximate cost of $2,000,000.

The Alberta Ry. and Irrigation Co. was incorporated by an act of the Dominion Parliament in 1904, provision being made for the amalgamation under this title of the Alberta Ry. and Coal Co., the Canadian Northwest Irrigation Co., and the St. Mary's River Ry. Co. In the following year Parliament granted the company power to purchase the charter rights of the Western Alberta Ry., which had been incorporated in 1898 to construct a railway from the International boundary, along the Old Man River valley, to Canmore and Anthracite, and via the Cascade and Red Deer rivers to the North Saskatchewan, and on to the eastern base of the Rocky Mountains, which charter powers have since been renewed from time to time. Of the companies amalgamated as the A.R. and I. Co., the original was the North-Western Coal and Navigation Co., operating under a charter granted by the Imperial Government, which was confirmed by an act passed by the Dominion Parliament in 1884. Land subsidies were granted to the company by the subsidy acts of 1885, 1887, 1889, and 1890, in which year a special act was also passed extending the time for the construction of the company's authorized railways. In 1884 the Dominion Parliament passed an act incorporating the Alberta Ry. and Coal Co., but nothing definite was done, as in 1889 another act of incorporation was passed. In 1890 Parliament authorized the changing of the gauge of the line, and the application of certain Imperial Acts to the operations of the company if the property of the North-Western Coal and Navigation Co. were purchased. In 1892 an act was passed authorizing the construction of extensions of the railway, and the construction of irrigating works for the purpose of reclaiming lands granted to the company under the subsidy act of 1890. Authority was given to sell or lease the company's railway to the C.P.R., by an act passed in 1893; to enter into agreements with the C.P.R. or the Calgary and Edmonton Ry. in 1901; to amalgamate with the St. Mary's River Ry. in 1903, and to amalgamate with the A.R. and I. Co. in 1904, while acts affecting the finances of the company were passed in 1891 and 1895. The Canadian North-West Irrigation Co. was incorporated for the purpose of constructing irrigation canals and developing the land grants earned by the construction of the railways. The St. Mary's River Ry. was incorporated by the Dominion Parliament in 1900, the time for construction being extended by an act passed in 1903, and cash subsidies were voted in aid of the construction of the lines authorized in the same years. In 1904 an act was passed providing for amalgamation with the A. R. and I. Co.

The railways constructed under these several charters included the line from Lethbridge to Dunmore Junction, Alta., 106.8 miles, which was sold to the C.P.R. several years ago. The company also controlled or owned the Great Falls and Canada Ry. from the International Ry. to Great Falls, Montana, which in 1902 was sold to the Great Northern Ry., U.S. The remaining lines of the company have a total length of 111.82 miles, with 11.59 miles of yard track and sidings, 0.53 miles of spurs, and trackage rights over 1.60 miles of C.P.R. lines. The lines extend from Lethbridge to Coutts, Alta., at the International boundary, where connection is made with the old Great Falls and Canada Ry. (Great Northern Ry., U.S.), 65.12 miles, and from Stirling to Cardston, Alta., 46.70 miles. All these lines were originally constructed as narrow gauge lines. In 1893, when the line from Dunmore to Lethbridge was sold to the C.P.R., it was changed to standard gauge. When the Great Northern Ry. acquired the Great Falls and Canada Ry. in 1902, the gauge of that line, as well as the line from Coutts to Lethbridge, was also changed to standard. The line from Stirling to Cardston is still narrow gauge, and in order to accommodate the traffic from that line (the old St. Mary's River Ry.) there is a third rail on the old Alberta Ry. and Coal Co.'s line between Stirling and Lethbridge, about 20 miles, so that both standard and narrow gauge traffic can be operated.

The company has outstanding $3,250,000 of common stock, and $4,337,975 of bonds, a total capitalization of $7,587,975. It received subsidies from the Dominion Government in cash amounting to $148,000 in addition to 1,114,368 acres of land voted to the several companies. Of the land subsidies a considerable area was set apart in 1893, when the Dunmore-Lethbridge line was sold to the C.P.R., and is being sold for the benefit of the two companies. The rolling stock owned by the company consists of two passenger locomotives, three freight locomotives, two switching locomotives, five passenger cars, 64 freight cars and nine cars in the company's service.

ELECTRIC RAILWAYS.

Edmonton Radial Railway Cars.

The Edmonton Radial Ry., Edmonton, Alta., is having built by the Ottawa Car Co., Ltd., seven motor cars, six double truck and one single truck, and all of a semi-convertible type. Following are the dimensions:

DOUBLE TRUCK CARS—	
Length of car body	28′ 2″
Length over all	38′ 6″
Width over side sheathing	8′ 2″
Seating capacity	40 persons.
SINGLE TRUCK CAR—	
Length of car body	21′ 0″
Length over all	31′ 0″
Width over side sheathing	8′ 2″
Seating capacity	32 persons.

The bottom framing of these cars is of wood reinforced with heavy steel plates and angles. The vestibules are circular in shape, and fitted at each side with automatic folding doors. The interior finish of the cars is cherry throughout, finished in natural color and polished. The seats are Ottawa Car Company's standard reversible, spring upholstered, and covered with rattan. These cars are equipped complete with up-to-date electric lighting and heating systems, and other fittings and appliances adapted to cars of their type. The larger of the car bodies are mounted on 27-G-1 trucks, and the smaller on a 21-E truck. The motor equipments are General Electric, no. 80, with K-6 and K-10 controllers. All of these cars are equipped with fenders and Piper electric headlights.

Projects, Construction and Betterments.

Brantford and Hamilton Electric Ry.—A temporary station for this railway is under construction alongside the Cockshutt bridge, at the foot of Market St., Brantford, Ont. The structure is a wooden one, and a flight of steps will be erected so that passengers can get down to the station from the bridge. (June, pg. 431).

British Columbia Electric Ry.—A consignment of 2,000 tons of steel rails has been delivered for laying on the New Westminster-Cloverdale section of the Chilliwack Ry., now under construction. Over 1,000 tons of rails have been delivered for laying on the line under construction between New Westminster and Eburne, and the work of laying them was expected to be started early in Nov. It is expected that both lines will be completed and ready for operation early in 1909.

A delegation of the New Westminster city council visited the dam which the company has constructed at Coquitlam Lake, Oct. 11. It was stated that it was the company's intention to raise the dam another 60 ft., in order to secure an adequate reserve of water for the power plant, but the mayor and aldermen expressed an opinion that this would interfere with the water supply of the city and it was arranged that the whole question will be gone into at a special conference.

The question of the development of electrical energy on the Jordan River, in the vicinity of Victoria, B.C., has been investigated by the company's engineer. His report will be submitted for consideration to the company. The proposition is to erect a plant for the generation of 10,000 h.p., at an approximate cost of $1,500,000. (Oct., pg. 737).

Calgary, Alta.—The question of the construction of the street railway in the city has been discussed at several meetings of the sub-committee appointed by the city council, but no definite decision has been reached. R. T. D. Aiken, representing the Montreal Engineering Co., was present at some of the meetings when the question of granting a franchise to that company was under consideration. The two points upon which the greatest division exists is with respect to the duration of the franchise, and the right to haul freight cars. The company desires a 25-year period and the right to haul freight cars at any time, while the committee does not want to recommend a longer franchise than one for 20 years, and to restrict the right to move freight to such times as may be from time to time fixed by the council. J. Short, K.C., attended at another meeting and urged the claims of another company to a franchise. In the meantime the committee states that the work of constructing the line will be proceeded with. The rails arrived early in Oct., and an inspector was sent to Revelstoke, B.C., to purchase ties. (Oct., pg. 737).

Dunnville, Wellandport and Beamsville Electric Ry.—The contract for the construction of the first portion of this line is said to be ready for signature, but is held pending the settlement of certain financial questions with Dunnville municipality. The matter will probably be settled early in Nov., by the passing of a by-law by the municipality, providing for the granting of a bonus of $20,000. No construction work will be undertaken before the spring, and in the meantime all arrangements will be made for rushing the line through. R. T. Gough, Toronto, is Chief Engineer. (Sept., pg. 665).

Edmonton, Alta.—A by-law has been prepared for submission to the ratepayers of Edmonton, Alta., authorizing the payment of $10,000 for the franchise of the Strathcona Radial Ry., the agreement for the purchase of which has been signed by the company and the Edmonton city council. In a letter re-

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cently submitted to the Calgary Street Ry. committee, it was stated, on behalf of the Edmonton council, that it was expected to have the 12 miles of track, including the double track laid on paved streets, completed in a few weeks. The tracks on the paved streets had been laid in the most thorough manner: 80-lb. steel rails in a cement bed, with iron ties. The rest of the lines are laid with 60-lb. rails and wooden ties. The number of cars required to start the service is seven; the city will furnish its own power, as there is being added to the present electric light and power plant a 700 k.w. producer gas plant. The company has so far issued debentures for $150,000, and has authority to issue a further amount of $135,000. The cost of the franchise purchased from Strathcona had been provided for in the amount of the debentures authorized to be issued. The service was inaugurated Oct. 29. (Oct., pg. 737).

Fort William, Ont.—The new 85-lb. steel rails for double-tracking the street railway lines in the city were delivered Sept. 29, and tracklaying was commenced Oct. 1. (Sept., pg. 665).

Hamilton St. Ry.—The City Engineer has submitted to the city council a plan for the construction of a switch line at the north end of the city. The idea is to have an electric switch line along the bay front, beginning at the foot of McNab St., and touching all the wharves, and the city dock, and connecting with the Northern branch of the G.T.R., just east of Wellington St., and with the Toronto, Hamilton and Buffalo Ry. spur line at the coal oil inlet. Another line is also suggested along the western arm of the coal oil inlet and then back again along the bay front.

The question of the improvement of the street railway in the city is being discussed. It was stated to be the intention of the company to spend $300,000 on improvements this fall, the work to include a new roadbed from the Turbine Steamship Co.'s dock to the corner of Herkimer and Queen streets, at a cost of $119,000. The company proposed to use T-rails on this line, and as the council desire to have girder rails used nothing can be done until this matter is settled. (Aug., pg. 583).

Hamilton, Waterloo and Guelph Railway.—The projected main line is from James and Gore sts., northwesterly through the City of Hamilton to Rock Chapel, at the summit of the mountain escarpments, and to Patterson Junction, West Flamboro tp., 7.26 miles from Hamilton. At Patterson Junction the main line will run northerly to Guelph, with a branch diverging westerly to Galt, through the townships of West Flamboro and Puslinch, and will pass in proximity to Millgrove, Haysland, Strabane, through Freelton, Schaw (C.P.R. station), Morriston and Aberfoyle, entering Guelph tp. at the Ontario Experimental Farm, there connecting temporarily with the Guelph Radial Railway, a distance of 22.04 miles from Patterson Jct., and 29.30 miles from Hamilton. The Galt branch is located through Beverly tp., into North Dumfries tp., taking in Greensville, West Flamboro, Rockton and Sheffield to Galt, 19.70 miles from Patterson Jct. and about 27 miles from Hamilton. The mileage given will be slightly increased to reach the terminals at Guelph and Galt, at present indefinitely decided upon.

The route outlined is the most favorable, and as direct as the hilly character of the country affords, with a maximum gradient of 2.8%, ascending the high lands westerly of Hamilton at Rock Chapel. The ruling gradient on all other sections is reduced to 1.8%. The minimum radius of curve, excluding the lines within the city limits, is 1,273.6 feet. The grading generally will be heavy, particularly the embankment over the old channel and through Dundurn and Harvey Parks, Hamilton, where extensive retaining walls and other structures are stipulated for in the city by-law. There will be eight combined concrete and steel bridges, the principal one being the viaduct over the C.P.R. and Desjardins Canal, 445 ft. long and 95 ft. high above lake level. All steam railways will be crossed overhead or by subway structures, and grade crossings of highways will be eliminated where practicable. The specifications call for standard roadbed, culverts in permanent materials and all work of high-class construction. The track will be of 80-lb. steel rails, fully ballasted and completed for safe, fast passenger runs and for freight traffic. The overhead system of electricity will be operated with power supplied by the Dominion Power and Transmission Company, Ltd. This railway has been for many years, and is at present, projected by John Patterson, of Hamilton, and it is to be hoped that he will succeed in its early construction.

Lethbridge, Alta.—A proposition has been submitted to the city council, with respect to the construction of an electric railway in the city. The mayor suggested that the matter be taken into consideration in connection with the proposition to pave the streets. A company had been organized and when the time was ripe would enter upon the construction of a radial line extending probably to Taber and Raymond. The work of paving the streets will not be taken in hand until 1909, and in the meantime the matter of the construction of a street railway, either by a company, or by the council as a municipal enterprise, will be investigated. (Sept., pg. 665).

Montreal and Southern Counties Ry.—The St. Lambert, Que., town council has approved of a by-law granting the company a franchise to operate a car line up St. Denis St., to and along Glen, Victoria, Green, Notre Dame, Desaulniers and Victoria streets, to the subway under the G.T.R. tracks, and to the southern boundaries of the town limits, subject to certain terms. Upon the acceptance of the terms by the company the by-law will be submitted to a vote of the ratepayers for final ratification. (Oct., pg. 737).

Niagara-Welland Power Co.—Application will be made next session of the Dominion Parliament for an act granting an extension of time within which the company may complete its authorized works, which include an electric railway.

Ontario and West Shore Electric Ry.—Thirty teams are reported to have been at work on this line north and south of Port Albert, Ont., during Oct., and considerable progress has been made with the grading. (Oct., pg. 737).

Ottawa Electric Co.—The contract for the concrete work and filling for the widening of the Somerset St. bridge for the street railway is being carried out by T. McLaughlin, Ottawa, and the steel superstructure will be erected by the Dominion Bridge Co. The new work will give an additional width to the bridge of 16 ft., and will cost about $14,000. (Oct., pg. 737).

Quebec and Orleans Ry.—The organization of this company, which was incorporated by an act of the Quebec Legislature passed in 1907, has been completed. The officers and directors being: President, Hon. C. E. Dubord; Vice-President, Judge Brochu; Secretary, P. Corriveau; other directors: A. Laberge, Woonsocket, R.I.; J. I. Auger, Providence, R.I.; L. Menard, Central Falls, R.I.; F. Turcotte, J. A. Lefebvre. With the exceptions named all the officers and directors reside in Quebec. It is said to have been decided to start the preliminary work at once, and engineers have been appointed to lay out the route, so that it will be possible to start grading in the spring. The proposition is to run a line from Quebec to Montmorency on the north side of the turnpike road, thence as far as Chateau Richer, where a bridge will be built to join the mainland with the Island of Orleans, and from the island end of the bridge to construct a belt line around the island. (Nov., 1907, pg. 841).

Toronto.—The Toronto Board of Control has passed a resolution authorizing the preparation of specifications for the construction of some proposed new street railway lines in the northwestern section of the city, and has also authorized the issuance of a call for tenders for laying down and operating the same, the Toronto Ry. Co. having refused to build the lines in question.

In connection with the proposal to secure a new entrance with street railway connection to the exhibition grounds, estimates have been presented by the City Engineer as to the cost of bridges. The City Engineer in his report says there is much less engineering difficulty in entering by way of Tecumseth St., but the advantages of the suggested Bathurst St. entrance are that it is the most direct route, and also provides a street railway line to the Island if one should be required. The cost of the bridges would be: Bathurst St. route, $107,000; Tecumseth St., $136,000; Strachan Ave., $160,000. These figures are exclusive of land damages. The City Engineer added that he was informed by the General Manager of the Toronto Ry., that the company was not prepared to consider the Tecumseth St. route. (Sept., pg. 665).

Toronto and York Radial Ry.—The work of reducing the gradient on the line southerly from St. Clair Ave., on the Metropolitan Division, has been completed. Hitherto the gradient was 4 ft. in 300 yards, and it has now been reduced to 9 ins. The patrol boxes and telephone lines formerly in use by the Toronto city police have been acquired by the company and will be installed on the Metropolitan division between Eglinton and Newmarket for operating purposes. A contract has been let to I. Rose, Newmarket, Ont., to erect stations at Jackson's Point and Sutton, Ont. (Oct., pg. 739).

Winnipeg Electric Ry.—The City Engineer is conferring with the company's officials with a view of securing the laying of tracks on Lilac St., to connect with the lines on Wardlow and Corydon streets. This will complete the Fort Rouge lines which were ordered about two years ago. (Oct., pg. 739).

Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Gross earnings for Aug., $180,945; expenses, $93,485; net earnings, $87,460; less renewal funds, $14,962; other income, $13,550; net income, $86,048, against $152,426 gross earnings; $80,518 expenses; $71,908 net earnings; $10,470 renewal funds; $61,438 net earnings; $11,036 other income; $72,474 net income for Aug., 1907. Total gross earnings for 2 months ended Aug. 31, $355,355; net earnings, including estimated income from investments, $168,020; against $303,766 gross and $145,942 net for same period 1907.

Halifax Electric Tramway Co.—Receipts for Sept., $21,084.64, against $18,125.18 for Sept., 1907. Total for 9 months ended Sept. 30, $140,902.90, against $133,387.69 for same period 1907. Receipts for 3 weeks ended Oct. 21, $10,057.65, against $10,543.22 for same period 1907.

International Ry. of Buffalo.—The gross operating revenue for the year ended June 30 was $4,702,850; operating expenses, $2,751,335; net operating revenue, $1,951,515; taxes, $244,682; operating income, $1,706,833; other income, $26,065; total income, $1,732,898; fixed charges, $894,-

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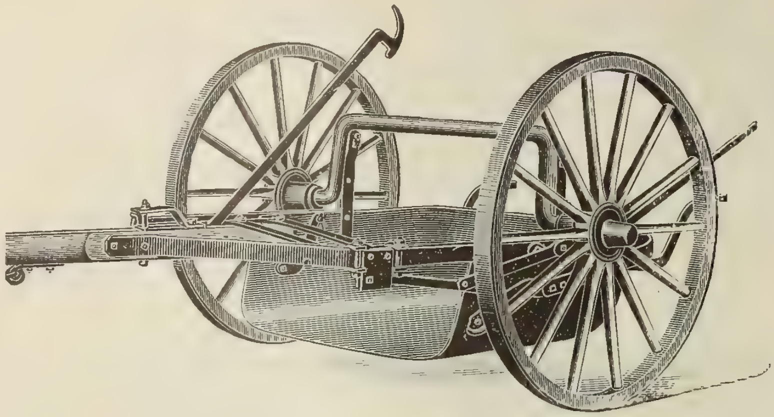
TORONTO, CANADA



Our **SOLID PRESSED BOWL DRAG** and **WHEEL SCRAPERS** are the most satisfactory in the market. They are pressed out of one solid sheet of steel and have no joints or seams.

We manufacture a complete line ot Contractors' Supplies, including

PLOUGHS **DUMP CARS**
DUMP WAGONS **DUMP CARTS**
WHEELBARROWS **TRUCKS**
CEMENT MIXERS **WAGONS**
etc., etc.

PROMPT SHIPMENTS **SEND FOR CATALOGUE**

THE INTERNATIONAL MARINE SIGNAL CO.

OTTAWA, CANADA

MANUFACTURERS OF

Automatic Acetylene Gas Buoys, Beacons and Fog Signals.

Mariners describe our lighted buoys as "floating lighthouses."

SUBMARINE SIGNALS

Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says:

"Nearly all my sea life I have been looking forward to getting the assistance of a reliable sound signal. Now I feel that we have got it, and all that is required, in my opinion, is its universal application."

Full Particulars on Application to the

Submarine Signal
COMPANY

BOSTON, MASS.

397; net corporate income, $838,501. Following are the officers and directors for the current year: President, T. Penney, Buffalo, N.Y.; Vice-President, T. E. Mitten, Chicago, Ill.; other directors, G. L. Boissevain, O. H. Payne, H. J. Pierce, N. Robinson, New York City; M. Cohn, jr., Niagara Falls, N.Y.; T. de Witt Cuyler, Philadelphia, Pa.; R. L. Fryer, O. P. Letchworth, P. Norton, G. I. Seney, H. M. Watson, H. C. Zeller, Buffalo, N.Y.; E. B. Osler, Toronto, Ont.; A. M. Robinson, J. C. Russell, Louisville, Ky.; Comptroller, J. W. Crawford; Treasurer, J. F. Slocum; Auditor, D. M. Deininger; General Manager, T. W. Wilson.

London St. Ry.—Gross earnings for Aug., $25,690.22; expenses, $15,176.44; net earnings, $10,513.78, against $22,452.12 gross earnings; $15,370.08 expenses; $7,082.04 net earnings for Aug., 1907. Total gross earnings for 8 months ended Aug. 31, $154,744.27; expenses, $110,792.70; net earnings, $43,951.57, against $153,156.55 gross earnings; $112,055.70 expenses; $41,100.85 net earnings for same period 1907.

Montreal St. Ry.—The directors have declared a dividend of 2½% for the quarter ended Sept. 30, payable Nov. 4 to shareholders of secord Oct. 14.

Quebec Ry., Light and Power Co.—A dividend at the rate of 7% for the year ended Oct. 31, on the preferred stock, was announced to be paid Nov. 1.

Toronto Ry.—Car earnings for Sept., $353,695.42, against $331,495.87 for Sept., 1907. Total earnings for 9 months ended Sept. 30, $2,625,622.00, against $2,528,164.41 for same period 1907.

Montreal Street Railway.

Following is a preliminary comparative statement of the earnings, expenses, etc., for the years ended Sept. 30, 1908 and 1907:

	1908	1907
Gross earnings	$3,677,432.45	$3,503,643.43
Operating expenses	2,158,394.09	2,104,653.42
Net earnings from operation	$1,519,038.36	$1,398,990.01
Interest from Montreal Park & Island Ry.	72,011.00	55,101.44
Total income	$1,591,049.36	$1,454,091.45
Fixed charges—		
City percentage on earnings	$ 242,431.15	$ 214,840.36
Interest on bonds and loans	207,187.17	195,833.64
Rental leased lines	5,019.72	3,059.64
Total	$ 454,638.04	$ 413,733.64
Net income	$1,136,411.32	$1,040,357.81
Dividend 10%	900,724.51	768,100.00
Surplus	$ 235,686.81	$ 272,257.81
From which has been appropriated—		
Contingent account	$ 175,000.00	$ 171,517.04
Insurance fund	25,000.00	25,000.00
Transferred to surplus account	35,686.81	75,740.77

Electric Railway Notes.

P. A. Freeman, Chief Engineer Halifax Electric Tramway Co., who underwent a serious operation in Sept., is convalescent.

The question of the Sunday operation of street cars in London, Ont., will, it is said, be dealt with at the municipal elections on Jan. 1, 1909.

The Toronto and York Radial Ry. has equipped some of its work cars on the Metropolitan division with Westinghouse automatic brakes.

W. T. Woodroofe, heretofore Assistant to the General Superintendent, B. C. Electric Ry., has been appointed, temporarily, General Superintendent, succeeding J. C. Milne, recently convicted of frauds on the company.

The Ontario Railway and Municipal Board held sittings at Toronto, Oct. 27 and 28, and had before it the questions of the necessity for additional street railway lines, and of the height of car steps in Toronto, West Toronto and London.

Press reports are busy with rumors of the contemplated absorption of the Dominion Power and Transmission Co., of Hamilton, Ont., by the Mackenzie, Mann & Co. interests, which control the Electrical Development Co. and the Niagara, St. Catharines and Toronto Ry.

A press report states that an agreement has been concluded between the Chatham, Wallaceburg and Lake Erie Electric Ry., and the Chatham Gas Co., whereby the latter company will supply from its power house the necessary electric power for the operation of the entire system between Wallaceburg and Lake Erie.

The Toronto Ry. Co. was indicted at the Toronto Assizes, Oct. 21, on a charge of neglect to use reasonable precaution to avoid danger to human life, in connection with the collision between one of its cars and a G.T.R. train at Front and John Sts. crossing, Toronto, recently, whereby a passenger on the T.R. Co.'s car lost her life.

The Brantford and Hamilton Electric Ry. Co.'s standard passenger tariff, C.R.C. 1, on the maximum basis of 3c. a mile, has been approved by the Board of Railway Commissioners. The Board's order 5195, dated Aug. 18, published in our Oct. issue, approved of the tariff as filed with the exceptions that the fare between stations 5 and 11 be 5c. instead of 10c., and between stations 5 and 13, 10c. instead of 15c.

Following on the resignation by Col. J. M. Gibson of the Presidency of the Dominion Power and Transmission Co., Hamilton, on his appointment as Lieutenant-Governor of Ontario, J. R. Moodie, heretofore Treasurer of the Company, was recently appointed President; J. Dixon and G. B. Blanchard, Vice-Presidents; W. C. Hawkins, Secretary and General Manager, and J. Knox, Treasurer. It has since been announced that G. B. Blanchard has resigned the Vice-Presidency, and newspaper reports give currency to the statement that the resignation was due to a difference respecting the company's policy.

At a meeting of the Commission appointed to operate the Fort William and Port Arthur street railways jointly, held Oct. 8, at Port Arthur, Ont., it was decided to notify the present treasurer that he would be held responsible to the Commission for all monies received by him on account of the street railway on and after Oct. 16, and that no money be paid without authority from the Board. Notices were also served on all employes, to terminate their engagements Oct. 31, those wishing to continue in the railway service to make written application by Oct. 20. The temporary Secretary, E. S. Rutledge, was also instructed to advertise for a Manager and Secretary-Treasurer, whose duties were to commence Nov. 1.

The application of the Toronto Ry. Co. for leave to appeal from the Ontario Railway and Municipal Board's order directing it to run its cars from Humberside Ave. to Keele St., West Toronto, was dismissed by the Court of Appeal Oct. 2. For the company it was contended that the powers conferred on the Board were equal to those enjoyed by the Superior Courts, and that as such powers could only be conferred by the Dominion Government, the powers so conferred by the Ontario Government were unconstitutional, and that the Board had no jurisdiction. The court decided that the Board had jurisdiction, and that the order was a proper one for it to make. On the question relating to the powers conferred on the Board, the Court held that the company had not raised this at the appropriate time, and refused to go into it.

Grain Elevator Notes.

The Northern Elevator Co. is moving its elevator from Sidney, Man., to Foam Lake, Sask.

The Port Arthur Elevator Co., Ltd., has increased its capital from $100,000 to $500,000.

The Saskatchewan Elevator Co. is reported to have secured a site at Rosthern, Sask., for the erection of an elevator this fall.

The Winnipeg Elevator Co.'s elevator at Macdonald, Man., was destroyed by fire, together with about 5,000 bush. of grain, Oct. 16.

The Dominion Elevator Co.'s elevator at Rosebank, Man., collapsed recently, necessitating the immediate removal of the grain stored, which was shipped east.

The grain traffic for St. John, N.B., during the winter is expected to be heavy, and steps are being taken for the accommodation and rapid handling of about 14,000,000 bush.

The Lorne Elevator Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $5,000 and offices at Altamont, to carry on a general elevator business there.

The G.T.R. is reported to have communicated to the Montreal Harbor Commissioners its willingness to materially increase its elevator capacity there, if suitable arrangements can be made.

The Farmers' Elevator Co.'s elevator at Rosebank, Man., was destroyed by fire recently, together with 30,000 bushels of new wheat. The elevator was insured for $4,000, and the contents for $25,000.

W. Maclachlan, who was in charge of the work of installing the electrical machinery in the Government elevator at Port Colborne, Ont., for the Canadian Westinghouse Co., is reported to have been appointed electrical superintendent of the elevator.

J. E. Dalrymple, Assistant Freight Traffic Manager G.T. Pacific Ry., on his recent return to Winnipeg from a trip over the line westward, is reported to have said that there are now 25 elevators along the G.T.P.R. completed and receiving grain.

It is reported from Winnipeg that the inspections of wheat for Sept. was 9,841 cars, against 2,140 for Sept., 1907. Elevators in all parts are reported full, and with the amount still to come forward, a heavy movement is anticipated during Nov.

The Mowbray Farmers' Elevator Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $5,000 and office at Mowbray, for the purpose of building and operating elevators and grain warehouses. The provisional directors are: R. Johnston, J. H. Johnston, J. Deason, R. Jackson, E. D. Garrett, of Mowbray, Man.

The Port Colborne elevator received its first cargo Oct. 7, the Midland Prince unloading 315,000 bush. there, this being the largest cargo yet landed at a Canadian inland port. J. A. Jamieson, Montreal, the engineer and designer of the elevator, superintended the unloading operations, and the machinery makers interested also had representatives there.

Godwin, Murray, Barnhart, Ltd., has been incorporated with a capital of $18,000, and office at Montreal, with power among other things to deal in grain, flour, etc., and to lease, erect and operate the necessary mills, elevators and machinery. The provisional directors are: C. B. Godwin, E. D. Murray, A. C. Barnhart, W. O. H. Dodds, and H. Mackay, Montreal.

The Goderich Elevator and Transit Co., between the opening of navigation and Sept. 30, handled at its elevator at Goderich, Ont., 3,635,000 bushels of grain, from 51 steamships. A number of vessels simply discharged a sufficient quantity of grain to enable them to go through the Welland Canal. During the same period, 3,600 cars of grain were shipped out of the elevator.

The 500,000 bush. elevator at Richford, Vt., owned jointly by the C.P.R. and the Boston and Maine Rd., exploded and took fire Oct. 7. The whole structure was completely destroyed, together with 75 freight cars. The loss is estimated at $400,000. The number of men employed in the building was 21, of whom 11 lost their lives, as also did two women who were near the building at the time.

The Montreal Corn Exchange Association Committee on the Harbor Commissioners' recent letter respecting elevator facilities at that port, has reported in favor of the provision of an additional marine leg to the Commissioners' elevator before the opening of navigation in 1909, the construction of another elevator, and the desirability of fitting the present one to meet the requirements of the local trade as far as possible.

Complaint has been made to the Grain Standards Board at Winnipeg, that owing to the multiplicity of grades of grain presented for storage at Fort William and Port Arthur, and the necessity of reserving bins for small quantities of some particular qualities of off-grade grains, though the elevators were only partially filled, the handling facilities at these terminals were being tied up. A committee was appointed, Oct. 7, to investigate the matter and report to the board.

Considerable alterations and improvements have been made to the C.P.R. elevators at Fort William, Ont., for this season's work. Elevator A, which was built in 1884, has been re-timbered; B and C have been thoroughly overhauled and various improvements made, and a new working house has been erected at elevator D, equipped with four tracks, where cars can be loaded or unloaded simultaneously. The elevator has an unloading and elevating capacity of 256,000 bush. in 10 hours.

The recent negotiations between the Minister of Public Works and the C.P.R., and the Allan Steamship Line, for the provision of further facilities in St. John, N.B., harbor, for the handling of grain, have resulted in the C.P.R. making arrangements for the removal of a modern floating elevator from Montreal. The elevator will be towed to St. John by the C.P.R. tug Cruizer. The Minister has, it is said, agreed that the elevator will be taken over by the Government when the St. John Harbor Commission is appointed or the cost will be noted for consideration at the next session, with a view to the payment of the amount out of the city's appropriation.

A meeting of the Grain Growers' Co.'s executive was held recently at Winnipeg, to consider complaints from country points as to the alleged arbitrary methods adopted by elevator companies in refusing to accept special binned grain, etc., and also to discuss the question of Government ownership of elevators. A deputation waited on W. B. Lanigan, C.P.R. Assistant Freight Traffic Manager, in reference to the charges of 1c. per 100 lbs. freight, and $3 each bulkhead in bulkhead cars on grain. The deputation demanded the halving of the first charge, and the reduction of the second to $2. Steps are being taken to arrange a convention of the Premiers of Manitoba, Saskatchewan and Alberta with the object of devising a scheme for the Government control of the elevators of the three provinces.

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The shipbuilding output of British Colonial yards for 1907 is quoted at 193 vessels aggregating 33,680 tons. Canada ranks fourth in point of numbers, but first in tonnage, with 34 vessels of a total of 17,484 tons.

C.P.R. LANDS

THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00 " "
Map No. 5—South-Western Alberta	8.00 to 15.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7. West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00 to 25.00 per acre.

All prices are subject to change without notice

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160 Acres	at $	8 00	per acre,	cash payment	$191.70	first year's interest	$65.28	and nine instalments of	$160.00
"	"	9.00	"	"	215.70	" " "	73.46	" "	180.00
"	"	10.00	"	"	239.70	" " "	81.62	" "	200.00
"	"	11.00	"	"	263.60	" " "	89 78	" "	220.00
"	"	12.00	"	"	287.60	" " "	97 96	" "	240.00
"	"	13.00	"	"	311 55	" " "	106.10	" "	260.00
"	"	14.00	"	"	335.60	" " "	114.32	" "	280.00
	"	15.00	"	"	359.50	" " "	122 44	" "	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

THE CLIFTON HOTEL

NIAGARA FALLS, CANADA.

Rates $4 per day up, American Plan. For weekly rates and further information, address: GEORGE R. MAJOR, Manager.

OPEN THE YEAR ROUND

THE ONLY HOTEL THAT COMMANDS AN UNRIVALLED VIEW OF BOTH FALLS

HOW TO REACH THE CLIFTON HOTEL

Arriving on Grand Trunk Railway or Wabash Rd., at Niagara Falls, Ont. Hotel bus meets all trains or take trolley to hotel—7 minutes.

Arriving on Michigan Central Rd, Canadian Pacific Railway, at Victoria Park station—Hotel bus meets all trains, only three minutes' walk from station to hotel.

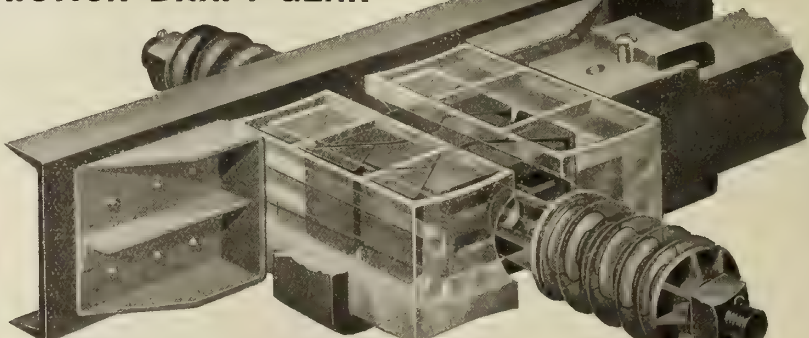
International Railway (trolleys), connecting with Niagara Navigation Co. steamers at Queenston, to or from Toronto, pass the door.

IMPORTANT

Guests coming to the Hotel should see to it that they are taken to The Clifton Hotel, CANADIAN SIDE, and also that their mail is addressed "Care of The Clifton Hotel, Niagara Falls, CANADA." To insure prompt delivery, don't forget to make CANADA plain in the address.

CARDWELL

FRICTION DRAFT GEAR



Furnishes greatest protection to cars and locomotives.

CARDWELL MFG. COMPANY, CHICAGO, ILL.

Manufacturers of CARDWELL ROCKER SIDE BEARINGS.

MARINE DEPARTMENT.

Notices to Mariners.

The following have been issued by the Dominion Department of Marine:

No. 87. Sept. 24.—220. Nova Scotia, south coast, Little Hope Islet, new tower, change in character of light.

No. 88. Sept. 25.—221. New Brunswick, Bay of Fundy, Quaco Ledge, bell buoy replaced by gas and whistling buoy. 222. New Brunswick, east coast, Miramichi Bay, Portage Island, range light established.

No. 89. Sept. 28.—223. Ontario, Lake Ontario, east end, Pigeon Island, new lighthouse under construction, light obscured, to the southwestward, caution. 224. Ontario, Detroit River, Elliott Point range lights, color of daymarks. 225. United States of America, Lake St. Clair, Anchor Bay, Clinton River entrance, range lights established. 226. United States of America, Lake Superior, Eagle River light station, light to be discontinued.

No. 90. Sept. 30.—227. Quebec, Gulf of St. Lawrence, Magdalen Islands, Entry Island, change in character of light. 228. Quebec, Gulf of St. Lawrence, Magdalen Islands, off Entry Island, whistling buoy established. 229. Quebec, Gulf of St. Lawrence, Magdalen Islands, Alright Reef, bell buoy established.

No. 91. Oct. 2.—230. Quebec, River St. Lawrence, below Quebec, Traverse of St. Roch, lower end, lightship placed.

No. 92. Oct. 5.—231. British Columbia, Chatham Sound, Prince Rupert harbor, Ellinor Rock, gas buoy withdrawn. 232. British Columbia, Chatham Sound, Prince Rupert harbor, Casey Point, gas buoy established. 233. British Columbia, Brown Passage, western entrance, Stenhouse shoal, gas and whistling buoy established.

No. 93. Oct. 6.—234. Ontario, River St. Clair, Stag Island shoal, light mast replaced by tower. 235. United States of America, Lake Superior, Marquette, change in light, new structure, fog bell established. 236. United States of America, Lake Superior, Two Harbors light station, intended change in characteristic of light.

No. 94. Oct. 7.—237. New Brunswick, Bay of Fundy, White Head Island, Prangle Point, bell buoy established. 238. Newfoundland, west coast, Gulf of St. Lawrence, Rich Point, temporary light. 239. Newfoundland, south coast, eastern entrance to Fortune Bay, Green Island, light and fog alarm station.

No. 95. Oct. 8.—240. Ontario, Lake Huron, Manitoulin Island, west end, Mississagi Strait, light improved. 241. United States of America, Lake Superior, Isle Royale, west coast, Rock of Ages, light and fog alarm established.

No. 96. Oct. 12.—242. Ontario, Detroit River, construction of tunnel between Detroit and Windsor, caution.

No. 97.—Oct. 15.—243. British Columbia, Vancouver Island, west coast, Estevan, change in duration of fog alarm blast. 244. British Columbia, Grenville Channel, Lowe Inlet, Day beacon, cannery. 245. British Columbia, northern waters, Burke Channel, Bela Kula anchorage, hydrographic notes. 246. British Columbia, northern waters, Graham Reach, Swanson Bay, Khutze Arm, hydrographic notes.

No. 98. Oct 22.—247. New Brunswick, Northumberland Strait, Baie Verte, Fort Moncton, lighthouse established. 248. Newfoundland, southwest coast, Cape Ray, temporary light.

No. 99. Oct. 23.—249. Ontario Lighthouse Division, Quebec, Lake St. Louis, Ottawa River mouth, Ile Perrot, changes in range lights. 250. Ontario, Lake Huron, off Great Duck Island, Jennie Graham shoal, bell buoy not in position. 251. United States of America, Lake Superior, Grand Island harbor, South Bay, Munising, range lights to be established.

The U.S. Hydrographic Office has issued the following:

No. 39. Sept. 26.—1688. St. Mary's River, West Neebish Channel, lights and gas buoys established. 1691. Lake Huron, Lake Huron light vessel, obstruction to northward. 1694. Lake Ontario, southern shore, Charlotte harbor, wreck. 1698. St. Lawrence River, Red Islet bank, hydrographic information.

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Blue Book of American Shipping.—The 13th annual directory of marine and statistics of shipping and shipbuilding of America, issued by the Penton Publishing Co., Cleveland, O., gives complete lists of shipowners, builders, marine architects, engineers, masters and members of the various marine organizations of the U.S. In addition, a considerable amount of information is given relating to shipping matters in Europe. In the Canadian section are lists of Canadian steam and sailing vessels operating on the Great Lakes, dry docks, Government graving docks, canals, and list of Canadian shipping officers. A summary of Canadian vessels is also given, showing tonnage constructed and added to the register during the past fiscal year. The book is well got up, and contains a number of illustrations.

Atlantic and Pacific Ocean Marine.

W. J. Davey, a partner in Elder, Dempster and Co., died in Liverpool, Eng., recently, aged 55.

The s.s. Hesperian, scheduled to sail from Montreal Nov. 21, will be the last of the Allan Line vessels to sail from Montreal this season.

The Allan Line s.s. Sicilian, which sailed from Montreal Oct. 10, has been chartered by the British Government to transport troops to Bermuda.

The Allan Line s.s. Corinthian, which recently collided with the Head Line s.s. Malin Head, has been repaired at Quebec, and sailed Oct. 11 for London and Havre.

The s.s. Sangstad from Middlesbrough, Eng., to Wabana, put in at St. John's, Nfld., Sept. 29, having broken her rudder post during a storm, about 500 miles east of that port.

The C.P.R. has applied for the same berths in St. John, N.B., harbor as it occupied last year, viz.: 1, 2 and 3. The Donaldson Line has applied for no. 4, and press reports state that the Allan Line, not having applied for its customary berths, intends reducing its sailings from that port.

A press dispatch from London, Eng., dated Oct. 12, states that a recent meeting of the Mayo, Ireland, County Council, after discussing the question of levying a rate of 3d. in the pound sterling in connection with the proposed railway to be constructed as a part of the Blacksod Bay scheme of the "all-red" route, broke up in confusion.

The Allan Line s.s. Sarmatian has been sold for breaking up, the price realized being £7,000. She was built at Greenock, Scotland, in 1871, and was fitted with triple-expansion engines, with cylinders 25, 42 and 68½ ins. diar. by 48 in. stroke, of 325 h.p. Her dimensions were: Length, 370.9 ft.; breadth, 42.2 ft.; depth, 35.6 ft.

The captain and crew of the schooner Grenada arrived in Halifax, N.S., recently from Rotterdam, Holland, where they were landed by the Manchester Liners' s.s. Manchester Spinner, after a rescue in the open sea. The Grenada, which sailed from Campbellton, N.B., Aug. 26, for New York, and met with bad weather, was finally abandoned. She was built at Horton, N.S., in 1888, her dimensions were: Length, 161 ft.; breadth, 34.6 ft.; depth, 15.1 ft.; tonnage, 635 register.

A London, Eng., paper states that a company is being formed in Norway with a capital of 10,000,000 kroner ($2,750,000), to inaugurate a direct line of steamships between Norway and Canada. It also states that the line will commence with two vessels of 8,000 to 10,000 tons register, having a speed of 17 knots, equipped for both passengers and freight, which will cover "the distance between Bergen and New York in eight days." It is to be hoped the main portion of the paper information is more correct than its geography, which treats New York as a Canadian port.

The large crane barge no. 379, recently built at Barrow-in-Furness, Eng., for the Montreal Harbor Commissioners, and which left Barrow for Montreal early in Sept., in tow of the steam tug Oceana, was discovered about Sept. 20 by steam trawlers, drifting about in the north Irish Sea, in close proximity to the rocky coast of Scotland. The barge was taken in tow by them and reached Stornoway Sept. 24. The Oceana had been compelled to abandon the barge, owing to damage sustained in a storm, and made for Londonderry, Ireland, where after undergoing repairs, she was to have gone in search of it.

Sir Christopher Furness, head of the shipbuilding firm of Furness, Withy & Co., and of the Furness Steamship Lines, West Hartlepool, Eng., recently invited delegates from the various trades unions connected with the trade to a conference, and laid before them certain proposals regarding relations between capital and labor. The proposals in brief are: that strikes must cease or the works would be closed; if it was considered that the trades unions could carry on the business, the firm was willing to sell out to them at a price to be fixed by assessors; if the trades unions were not willing to do this, the firm was willing to admit the workers to a profit-sharing scheme; and lastly that a council must be formed to settle all disputes or to refer them to accredited arbitrators.

In speaking at a dinner tendered him by the Victoria, B.C., Board of Trade, Oct. 22, Sir Thos. G. Shaughnessy, in referring to the C.P.R. proposals as to the betterment of the Pacific service, said: "The establishment of our Atlantic steamship lines has demonstrated the fact that no route between Europe and America—between Great Britain and this continent, at any rate—can in any way compare or compete with the Canadian. With the Empress of Britain arriving at Quebec at 3.45 this (Thursday) afternoon, and its passengers landed in Chicago at 10 o'clock to-morrow (Friday) night, we have beaten the record of any steamer which ever sailed from Liverpool to New York. I make this statement because the Empress of Britain and the Empress of Ireland will probably be visitors of yours at no very distant date, and I want you to appreciate them when they come."

Maritime Provinces and Newfoundland.

Capt. W. Folker has been appointed Port Warden at Windsor, N.S.

J. Moynagh has been appointed Measuring Surveyor of Shipping at Souris, P.E.I.

J. Dickson has been appointed Commissioner for the pilotage district of Louisburg, N.S.

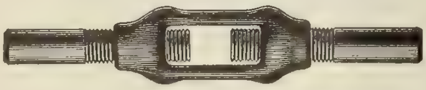
DOMINION BRIDGE CO., LTD., MONTREAL, P.Q.

BRIDGES

TURNTABLES, ROOF TRUSSES
STEEL BUILDINGS
ELECTRIC and HAND POWER CRANES
Structural METAL WORK of all kinds

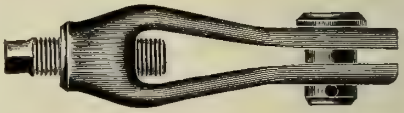
BEAMS, CHANNELS, ANGLES, PLATES, ETC., IN STOCK

TURNBUCKLES



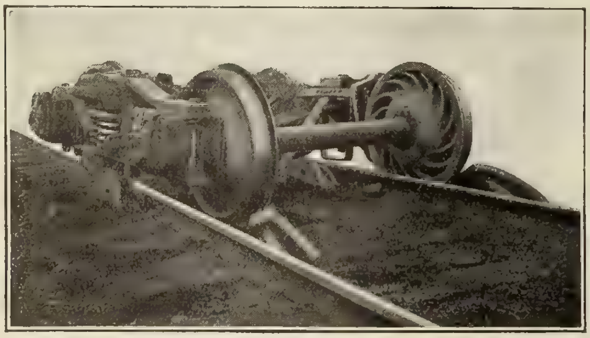
FORGINGS
OF ALL KINDS

CLEVIS NUTS



CLEVELAND CITY FORGE & IRON CO.
Cleveland, Ohio, U.S.A.

The Alexander Car Replacer



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T. Stinson has been appointed temporary Measuring Surveyor of Shipping at St. Andrews, N.B.

The N.B. Public Works Department is inviting tenders for the construction of a wharf at Gunter's Landing, Gagetown, and also one at Brown's Flats, Greenwich.

A schooner named Frank D. Cook was launched at Lunenburg, N.S., recently, for W. C. Smith and Co. Her dimensions are: Length over all, 120 ft.; keel, 90 ft.; breadth, 26 ft.; depth of hold, 11 ft.; tonnage, about 98 register.

Tenders will be received by the Public Works Department, Nov. 12, for the construction of wharves to be built at The Range, Burton, Newcastle, Barker's, McAllisters, Young's Cove, Ironbound Cove, Scotchtown, and Lower Jemseg, N.B.

Reports have been received by the Minister of Marine from Capt. Bernier, of the Dominion Government s.s. Arctic, to the effect that he arrived at Etah, on the Labrador coast, Sept. 19, and sailed on the following day north to Lancaster Sound.

The salvage operations on the s.s. Turret Bell, which was wrecked near St. Peter's, P.E.I., about two years ago, are proceeding satisfactorily. The vessel has been moved a considerable distance, and it is expected that she will be successfully floated shortly.

A recent press despatch from England states that the Bay of Islands Syndicate has in the Scottish Courts obtained judgment, with £3,000 damages, against the Reid Newfoundland Co., for alleged breach of contract regarding an option to purchase a piece of land known as Carters.

G. J. Desbarats, Acting Deputy Minister of Marine, who was in St. John, N.B., recently, was reported to be negotiating for a site there, for the construction of wharf and dock facilities for the Government steamers, buoy and carbide storage, and repairs to the various aids to navigation along the coast.

A steel three-deck tank steamer, under construction for Bowring & Co., of Liverpool, Eng., and St. John's, Nfld., was launched at Wallsend-on-Tyne, Eng., recently. Her dimensions are: Length, 396.5 ft.; breadth, 50.6 ft.; depth, moulded, 31.10 ft. She is being equipped with triple-expansion engines with cylinders 26, 43 and 72 ins. diar., by 48 ins. stroke, supplied with steam, at 180 lbs. pressure, by three boilers. The oil capacity is 6,900 tons.

Province of Quebec Marine.

The grain conveyors installed by the Montreal Harbor Commissioners are now in full operation, the work having been completed Oct. 16.

A press report states that F. W. Cowie, Chief Engineer Montreal Harbor Commissioners, is engaged in arranging a scheme of improvements to the harbor, to be extended over a period of 25 years.

The Quebec and Levis Ferry Co.'s ferry steamboat Henry R. James has been docked to receive iron sheathing in preparation for the winter season, when she is to be used to convey railway cars between Quebec and Levis.

The Quebec Harbor Commissioners have issued a notice, calling attention to the regulation requiring that all vessels and small craft navigating the harbor at night carry lights, and intimate that infringements will be strictly prosecuted.

The Montreal Harbor revenue for Sept. was $50,004, against $49,079 for Sept., 1907. The amounts are made up as follows: imports, $27,000; exports, $14,000; local traffic, $9,004; compared with $29,000 imports; $13,000 exports; $7,079 local traffic in 1907. From the opening of navigation to Sept. 30, the revenue amounted to $234,846, against $231,830 for the same period 1907. The number of ocean-going vessels arriving during the period from the opening of navgation to Sept. 30, is 579, with a total tonnage of 1,514,829, an increase of 8 vessels and 35,471 tonnage over the figures for the same period 1907.

Ontario and the Great Lakes.

W. C. Simmons has been appointed Government wharfinger at Bracebridge, Ont.

W. McAvoy, for many years associated with the lake marine, died at St. Catharines, Oct. 2, aged 60.

The steambarge Kitchen, which ran aground on the Jackass Shoal, near Morrisburg, Oct. 5, was released after removing cargo.

The Richelieu and Ontario Navigation Co. has under consideration the question of building another vessel for service on the St. Lawrence route.

The Marine Department is installing vapor lamps at Bois Blanc lighthouse, and at Colchester, Pelee Island, and Middle Ground, Lake Erie.

The Western Steamship Co.'s s.s. J. A. McKee arrived at Toronto, Oct. 12, and subsequently proceeded to Fort William on her maiden lake trip.

The Montreal and Cornwall Navigation Co.'s s.s. Britannic has been docked at Montreal for a general overhauling before being berthed for the winter.

The contract for trimming the slopes of the Cornwall Canal has been awarded by the Department of Railways and Canals to J. J. and V. S. Fallon, Cornwall.

The Montreal Transportation Co.'s s.s. Kinmount arrived at Port Arthur Oct. 12 with steel rails, on her maiden lake trip. A description of her was given in our Oct. issue.

The Algoma Central Steamship Co.'s s.s. King Edward has completed repairs at Collingwood, and has returned to Sault Ste. Marie, where it is said she has been berthed for the winter.

A scow owned by the Reid Wrecking Co., Sarnia, while engaged in salvage operations on the s.s. Monarch, at Isle Royale, overturned, Oct. 5, and two men employed on her were drowned.

The salvage operations on the Northern Navigation Co.'s s.s. Monarch, which was wrecked on Isle Royale late in 1906, have been completed. Everything has been removed but a few planks

Capt. Roys, of the s.s. Aletha, was fined $175 at Belleville recently for carrying an excursion party without a proper certificate. Three other charges of overloading were made, but dismissed.

The Midland Navigation Co.'s s.s. Midland Prince, while upbound Oct. 12, struck an obstruction in the Neebish channel, piercing a hole in her hull and filling the forward compartments with water.

The Wiarton schooner John T. Mott was destroyed by fire at Wiarton, Oct. 8. She was built at Oswego, N.Y., in 1869, her dimensions were: Length, 137 ft.; breadth, 26 ft.; depth, 11 ft.; tonnage, 309 register.

The Inland Navigation Co., Ltd., a company incorporated under the Dominion Companies Act, has been licensed to carry on its business in Ontario, and A. B. Mackay, Hamilton, has been appointed its attorney.

The improvements in the Sault Ste. Marie canal, past the Vidal shoal above the Canadian lock, have been completed, and the improved channel was opened for traffic Oct. 12. Temporary range lights have been established north of the present range.

The ferry steamboat Ariel, running between Walkerville and Detroit, was struck by the s.s. Energy, Oct. 14, during a fog. The bow of the latter struck the Ariel near the ladies' cabin, one passenger being cut by falling glass. The Energy has been laid up for repairs.

A press report states that shots were exchanged between Canadian fisheries protection officers and some U.S. fishermen, opposite Whitefish Point in Lake Superior, Oct. 8. It is alleged that the U.S. vessel has been poaching in Canadian waters; no capture was, however, made.

The lighthouse erected by the Dominion Department of Marine on Stag Island, in the St. Clair River, was put into operation Oct. 17. It is the intention of the Department to establish range lights at Sailors' Encampment, for the reopening of navigation, to replace the small beacon lights now there.

The water of the Ottawa River at the foot of the lock registered its lowest stage, Oct. 11, since the construction of the lock. The depth registered was 4 ft. 10 ins. The Ottawa Forwarding Co.'s steamboats Hebron and Scotsman had to be unloaded recently before they could be taken over the lowest sill of the lock.

The G.T.R. has purchased the car ferry Manistique, and will operate her between Grand Haven and Milwaukee. She was built at Cleveland, O., in 1903, her dimensions are: Length, 338 ft.; breadth, 56 ft.; depth, 19 ft.; tonnage, 2,933 gross, 1,775 net, and has capacity for 32 freight cars. It is stated that she will be renamed Milwaukee.

The St. Lawrence and Chicago Navigation Co.'s s.s. E. B. Osler ran aground on Gravel Island, Oct. 20, and was released after lightering about 1,000 tons of coal. Her bottom was considerably damaged, and she has been taken to the U.S. for repairs, there being, it is said, no dry dock of sufficient capacity on this side of the border.

Capt. Wm. Peace, one of the few remaining pioneers of shipping on the Great Lakes, died at Hamilton Oct. 10, aged 80. One of the vessels commanded by him was the Sweepstake, for the saving of which from the Chicago fire he was presented with a gold watch by the owners. He was a membe of the local naval brigade at the time of the Fenian raid.

The body of Capt. J. H. Scott, of the Rideau Lakes Navigation Co.'s s.s. Rideau King was taken from the slip on the east side of Swift's wharf, Kingston, Oct. 5. It is presumed that in returning to the vessel on the previous evening, he was attacked by faintness. He was 69 years of age, and had been associated with marine life for over 50 years.

The Turbine Steamship Co., in its action against the owners of the Knapp roller boat for damages sustained by the s.s. Turbinia, caused by a collision with the roller boat, which broke loose from its moorings in Toronto harbor some time ago, obtained a verdict for $250. The defence was that the roller boat was not a ship within the meaning of the Act.

The Northern Navigation Co. has awarded a contract for the construction of another vessel. Her dimensions will be: Length, 135 ft.; breadth, 25 ft.; depth of hold, 9 ft.; and she will be capable of a speed of 15 miles an hour with twin screws. She will be built at Collingwood, and it is intended to have her completed by May 15, when she will be operated between Penetanguishene, Parry Sound, and Point au Baril. The

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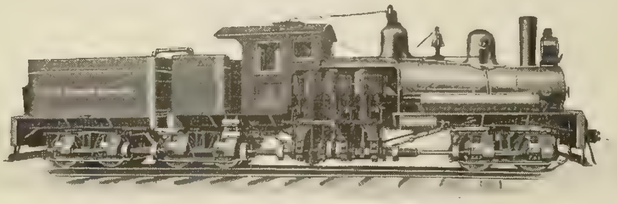

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The Dominion Public Works Department's steam dredge Sir Wilfrid, which was sunk near Port Hope about 4 years ago, and raised last fall, has been practically rebuilt at the Polson Iron Works, Toronto, and recently underwent preliminary trials there, prior to her being handed over to the Government. Her dimensions are: Length, 106.9 ft.; breadth, 36.8 ft.; depth, forward, 18.6 ft.; aft, 9.6 ft. It is understood that this dredge will be utilized on the work at the Toronto eastern gap, and that in the spring she will be sent to the Maritime Provinces.

The Northern Navigation Co. has sold its s.s. City of Toronto to Mrs. Oliver Gillespie, Cornwall, Ont. It is intended to operate the vessel between Cornwall and Montreal, under the management of Capt. O. Gillespie, in opposition to the Britannic, also recently sold by the Northern Navigation Co. to the Montreal and Cornwall Navigation Co. The City of Toronto was built at Owen Sound, Ont., in 1895, and is a paddle-wheel steamboat, with engine of 34 n.h.p. Her dimensions are: Length, 150 ft.; breadth, 24 ft.; depth, 9.2 ft.; tonnage, 782 gross, 492 register.

Manitoba, Saskatchewan, Alberta, Etc.

A press report from Winnipeg states that relatives of those who met their death in the Premier disaster at Warren's Landing on Lake Winnipeg, have entered actions against the Dominion Fish Co., the operators of the vessel, for damages, and also that the owners of the boat have entered a claim for $60,000.

The work on the St. Andrew's lock and dam is progressing rapidly. The temporary dam at St. Andrew's rapids has been completed. A dredge is being utilized below this dam clearing the ground for the construction of the permanent dam. A portion of the canal cut still remains to be done. A push is being made to complete as much as possible of the whole work before winter, and extra men will be put on as they can be secured.

W. Robinson, President Dominion Fish Co., on his recent return to Winnipeg after a visit to Chicago, in connection with the failure of A. Booth & Co., stated that the Booth Co. would probably be reorganized and started on a firmer basis than before, but in any case the Dominion Fish Co., which is an entirely separate organization, would continue to do business, and the only effect the failure would have would be by reflection. Later reports state that the reorganization scheme has fallen through, and that a decision has been reached to sell the Booth company's property. The Bank of Nova Scotia has entered an action against the Booth Co. for the recovery of $10,041.67 alleged to be due on promissory notes.

B.C. and Pacific Coast Marine.

H.M.S. Algerine is undergoing repairs at Esquimalt, after a cruise in Behring Sea.

Sloan and McDonell, of Port Essington, are reported to have purchased a small river steamboat to run on the Skeena River.

The Victoria barkentine Everett G. Griggs has been chartered to carry wheat from San Francisco to Great Britain or continental ports.

The last steamship of the season carrying all classes of mail matter for Dawson and other points north of White Horse, left Vancouver Oct. 1.

The monument erected to the memory of Simon Fraser, the discoverer of the Fraser River, in Vancouver, was unveiled by the B.C. Premier Sept. 30.

The Norwegian s.s. Thordis, which ran aground off Cape Mudge during Sept., is being repaired at Esquimalt. A number of frames and plates have to be replaced.

An effort is being made to secure a steamboat service connecting with Masset. H. Edenshaw, of that town, was in Vancouver and Victoria recently negotiating with that object.

The sternwheel steamboat Strathcona has been placed in service between Vancouver and the Fraser Valley, New Westminster, Chilliwack and way landings, making two trips weekly.

Sir Thos. G. Shaughnessy announced at Victoria, Oct. 22, that beginning with Nov. the passenger rates between Victoria and Vancouver on the C.P.R. boats would be reduced 20%.

The Union Steamship Co.'s s.s. Caribou is reported to have been sold, and that she will be re-named Courchan. She was built on the Clyde, Scotland, in 1907, her dimensions being: Length, 157 ft.; breadth, 32 ft.; depth, 13 ft.

LIST OF STEAM VESSELS REGISTERED IN CANADA DURING SEPT., 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
C. R. Lamb...	122,398	Kamloops, B.C., 1907.....	Paddle 34 N.H.P.....	91.3	19.9	4.0	192	121	Victoria, B.C........	Arrow Lakes Lumber Co., Arrowhead, B.C.
City of Vernon	122,400	Long Lake, B.C., 1908.....	Screw 5 "	50.0	11.2	4.7	19	13	" "	C. C. Pilkey, Vernon, B.C.
Clousta.......	126,213	Vancouver, B.C., 1908.....	" 1 "	29.0	8.5	3.2	7	4	Vancouver, B.C......	W. J. Davidson, Vancouver, B.C.
Corsande.....	126,177	N. Westminster, B.C., 1907	" 1 "	29.6	8.0	3.6	8	6	N. Westminster, B.C.	J. Crane, New Westminster, B.C.
Dodger.......	126,214	Port Moody, B.C., 1908....	" 3 "	30.5	8.7	3.0	5	3	Vancouver, B.C......	R. Wooldridge, Port Moody, B.C.
Isabella McCormack...	122,399	Golden, B.C., 1908........	Paddle 3 "	94.9	18.8	3.5	178	112	Victoria, B.C........	Columbia River Lumber Co.,Golden,B.C.
Ocelot.......	116,684	Richibucto, N.B., 1908....	Screw 1 "	37.0	10.0	5.0	13	11	Richibucto, N.B.....	W. E. Forbes, Richibucto, N.B.
Scotsman.....	116,114	Hull, Eng., 1903..........	" 60 "	98.0	10.0	9.5	141	12	Halifax, N.S........	The Scotsman Co., Ltd., Halifax, N.S.
Sea Adder....	116,685	Richibucto, N.B., 1908....	" 6 "	32.8	10.0	5.6	11	10	Richibucto, N.B.....	J. Legoof, Richibucto, N.B.
Skeena.......	126,212	Vancouver, B.C., 1908.....	Paddle 8 "	121.2	26.8	5.6	515	310	Vancouver, B.C......	J. W. Stewart, Vancouver, B.C.
Solid Comfort	122,565	Peterboro, Ont., 1908......	Screw 1 "	44.0	11.0	4.2	16	11	Peterboro, Ont......	Peterboro Canoe Co., Peterboro, Ont.
Two Macs....	122,611	Lorain, U.S.A., 1880......	" 3 "	55.3	13.0	6.0	24	16	Goderich, Ont.......	R. McKay and A. McDonald, Goderich, Ont.
Vera S. Fry...	126,211	Vancouver, B.C., 1908.....	" 1 "	29.0	10.5	4.8	9	6	Vancouver, B.C......	G. H. Fry, Vancouver, B.C.
Whirl........	112,350	Kingston, Ont, 1908.......	" 1 "	37.0	8.2	3.2	10	7	Brockville, Ont......	J. McGraw, Brockville, Ont.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING SEPT., 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross Tons	Reg. tons.	Port of Registry.	Owners.
Albert J. Lutz..	121,818	Shelburne, N.S., 1908......	Schr.	90.0	23.0	9.8	..	95	Digby, N.S........	J. D. Apt, M.O., Port Wade, N.S.
Atheling........	126,131	Jeddore, N.S., 1908........	"	63.8	19.7	8.2	..	63	Halifax, N.S.......	A. Webber, Jeddore, N.S.
Belle Hanscom..	116,960	Toledo, U.S.A., 1874......	Scow	129.5	24.6	10.5	..	289	Sarnia, Ont.......	Reid Wrecking Co., Sarnia, Ont.
Exilda.........	125,966	Pt. Greville, N.S., 1908.....	Schr.	144.9	34.0	11.4	..	349	Parrsboro, N.S....	J. N. Pugsley, M.O., Parrsboro, N.S.
Helen C........	111,800	Cheticamp, N.S., 1908.....	"	34.5	10.0	5.0	..	12	Port Hawkesbury, N.S..............	S. Belfontaine, Cheticamp, N.S.
Helen Glen.....	126,185	Jordan Bay, N.S., 1908....	Sloop	34.0	11.7	5.7	..	10	Shelburne, N.S....	Edward and Edwin Hammond, Jordan Bay, N.S.
James William..	103,807	New Glasgow, N.S., 1908..	Schr.	146.4	33.5	12.7	..	440	Pictou, N.S.......	Carmichael Ship Co., Ltd., New Glasgow, N.S.
J. G. Scrimgeour	126,063	Murray Harbor,P.E.I., 1908	"	34.0	12.2	4.8	..	14	Charlottet'n,P.E.I..	H. Williams, Beach Point, P.E.I.
Josie W........	122,594	Shelburne, N.S., 1908......	Sloop	42.0	12.9	5.7	..	15	St. Andrew's, N.B.	L. C. Watt, Grand Manan, N.B.
Katherine V. Mills.........	126,012	Granville Ferry, N.S., 1908.	Schr.	118.0	29.8	10.2	..	216	Annapolis Royal, N.S............	A. D. Mills, M.O., Annapolis Royal, N.S.
Katie H........	125,998	Quebec, 1908.............	Scow	154.0	30.2	9.7	..	370	Quebec...........	Quebec Transportation and Forwarding Co. Quebec.
L.C. & S., No. 1..	126,163	Cornwall, Ont., 1906......	"	57.0	16.0	3.5	..	53	Montreal..........	L. Cohen, Montreal.
L'AuroreBoreale	126,160	St. Jean des Chaillons, 1908	Schr.	107.0	23.1	6.9	..	127	"	J. B. A. Houde, St. Jean des Chaillons, Que.
Little Giant.....	126,161	Cornwall, Ont., 1908......	Dred.	79.5	26.8	5.7	..	133	"	L. Cohen, Montreal.
Leonice........	122,595	Gloucester, U.S.A., 1856...	Schr.	56.0	17.3	6.2	..	27	St. Andrew's, N.B.	H. G. Snell, St. Croix, N.B.
Lolita A........	112,345	Liverpool, N.S., 1902......	"	100.6	29.0	10.8	..	159	Liverpool, N.S.....	S. Courtney, St. John's, Nfld.
Lottie V. M.....	126,132	West Dover, N.S., 1908....	"	40.6	11.8	4.7	..	10	Halifax, N.S......	I. Morash, M.O., West Dover, N.S.
Mogul..........	126,162	Cornwall. Ont., 1906......	Barge	82.6	32.5	6.5	..	168	Montreal..........	L. Cohen Montreal.
R. R. Christian..	126,093	Not known...............	..	93.9	17.7	8.3	..	107	St. Catharines, Ont.	G. R. Smith, Dunnville, Ont.
*Shanks........	117,166	Italy, 1884...............	Barq.	193.0	37.0	23.0	..	1034	Windsor, N.S......	G. E. M. Lewis, Truro, N.S.
Sidney, No. 2...	126,179	Seattle, U.S.A., 1908......	Barge	160.0	34.0	8.9	.. ..	378	New Westminster, B.C............	Vancouver, Victoria and Eastern Ry. and Navigation Co., Vancouver, B.C.
Trenton........	126,125	Trenton, Ont., 1908.......	Dred.	74.8	30.6	7.6	..	251	Kingston, Ont.....	R. Weddell, M.O., Trenton, Ont.

*Formerly Affezione.

The steamboat Craigflower, a stern-wheeler, has been overhauled at Victoria, and new engines supplied, and, it is stated, will be run from Port Essington up the Skeena River, carrying supplies to G.T.P.R. construction camps.

The longshoremen at Victoria and Vancouver and other B.C. ports have decided to form a union for the advancement and protection of their interests, and will amalgamate with similar unions on the Pacific coast south of the boundary.

Announcement was made at New Westminster recently that the Dominion Public Works Department had let the contract for the construction of a dredge to be used in the cutting of a 30 ft. channel in the Fraser River, from New Westminster to the gulf.

The Virginia Dredging Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000, for the purposes, among other things, of undertaking dredging leases, etc., and to construct and operate ships, vessels and other works for the company's business.

Vancouver reports revive the rumor that the G.T. Pacific Ry. is about to enter the steamship business, and say it "on good authority" that plans have been submitted by Clyde shipbuilders for the construction of two vessels to ply between Vancouver, Victoria and Prince Rupert.

Petitions have been forwarded to the Marine Department, asking for the establishment of a lighthouse and diaphone fog alarm at Sherringham Point, the alteration of the fog alarm at Race Rocks to a diaphone, and the establishment of a diaphone fog alarm at Harrison Island, near Macaulay Point.

The C.P.R. s.s. Princess Victoria, and the U.S. steam schooner Ida May, collided near Apple Tree Point during a fog, Sept. 29. The Ida May was almost cut in two, and after the collision remained fast to the Princess Victoria, to which she was lashed. The wreck was subsequently beached and the crew returned to Seattle.

The C.P.R. s.s. Princess Charlotte, recently built on the Clyde, Scotland, for the Victoria, Vancouver and Seattle route, made an average of a little over 20 knots an hour for the six hours of her speed trials. It is stated that she will sail for Vancouver early in Nov. A full description of this vessel was given in our Aug. issue.

Changes in the dry docks regulations have recently been announced at Victoria, as follows: Vessels of 430 to 450 ft., to pay $550 for the first day instead of $400; those of 450 to 480 ft., $700 instead of $400 for the first day; subsequent days to be charged at the rate of 4c. a ton for 2,000 tons, and 2c. for each additional ton. Repairs must be commenced within five days of entering, or the vessels must leave.

A Vancouver press report states that the surveys made by H.M.S. Egeria last summer, show that Brown Passage between Dundas and Stephen Islands, the most direct route to Prince Rupert, is so studded with dangerous reefs as to make safe navigation impossible, and that should the route to the northward of Upper Dundas Island, and thence southerly down Chatham Sound, be adopted, the distance between Prince Rupert and the open sea will be increased by about 70 miles.

The steamboat Port Simpson, which was damaged in passing through the Kitselas canyon, on the Skeena River, arrived at Port Essington under her own steam. The chief damage is to the wheel and steering gear, caused by the repeated striking of her stern and bow alternately on each bank, as she came down stream practically broadside on. It appears to be customary to take the swift current stern foremost,

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but in this case she started bow first, and her stern was swung inshore.

Greer, Courtney & Skene, Ltd., which has recently been incorporated with offices at Vancouver, Victoria and Prince Rupert, B.C., has, as its principal stockholders, B. W. and J. H. Greer, G. L. Courtney, and J. L. Skene. B. W. Greer was until recently Assistant General Freight Agent C.P.R. at Vancouver, and G. L. Courtney was District Passenger Agent C.P.R. at Victoria. The company has the management of the Queen City Trading and Transportation Co., Ltd., owning the tugs Queen and Stetson; the Pacific Towing and Lighterage Co., Ltd., owning tug Albion, hulk Alexander and scows Gog and Magog; and the Marion Tugboat Co., Ltd., owning tug Owen. The company is agent for tugs Achates, Boyden, McCulloch, Senator, and steamboats Trader and Ophir, and for the French Steamship line Chargeurs Reunis, as well as for the German Alliance Insurance Corporation and the St. Paul Fire and Marine Insurance Co.

The Steamboat Premier Disaster.

Commander O. G. V. Spain, R.N., delivered judgment in this case at Winnipeg, Oct. 16, as follows:

In the matter of a formal investigation into the causes which led to the burning of the steamboat Premier on Aug. 6, 1908, at Warren's Landing, at the head of Lake Winnipeg, by which casualty 8 lives were lost; held at Winnipeg, before Commander O. G. V. Spain, Wreck Commissioner for Canada, and Commissioner Perry, of the Royal Northwest Mounted Police. The Court having made a most thorough and exhaustive enquiry into all the circumstances attending the above-mentioned casualty, and having carefully reviewed the whole of the evidence that it was possible to obtain from the officers and crews of the vessel herself and other vessels in the vicinity, and also having heard the evidence of passengers and interested parties, finds as follows:

The s.s. Premier is a wooden vessel, built in 1896 at Selkirk, Man., 126 ft. long, 22 ft. 9 in. beam; 8 ft. 9 in. depth of hold; 414 gross tonnage, and owned by the Dominion Fish Co., Ltd., of Winnipeg, and commanded by Capt. Stevens, who holds a certificate of competency in the minor inland waters. On her last voyage she left Selkirk on Aug. 3, bound to Warren's Landing, laden with a cargo of mixed merchandise and empty fish boxes; the vessel was then tight, staunch, and strong, manned by a proper crew, the officers having the proper certificates and at that time she was fit in every way to perform the proposed voyage. She arrived at Warren's Landing about 7 p.m. on Aug. 5, made fast to the dock and was loaded with fish, furs, and other freight, to be transported to Selkirk, for which port it was intended she should leave at 4 o'clock the following morning. However, shortly after midnight, the ship caught fire, drifted away from the dock, stranded on a shoal in the vicinity, and was burnt to the water's edge; There were 38 people all told on board, and of these, all escaped with the exception of 8; these, in the opinion of the Court, were undoubtedly killed by burning or suffocation.

The object of the enquiry is to bring out clearly, and as far as possible, the facts of the case in regard to the burning of the vessel; this Court has no criminal jurisidiction and the taking of criminal action will be considered by the proper authorities. In regard to the origin of the fire, the evidence is most conflicting, but the Court considers that the probabilities are that it started in the fire hold, more especially as there had been an incipient fire in the same place earlier in the evening, which had been put out; there is no doubt that the fire hold was not cleaned up properly and was left in a dirty condition, with chips and bark lying round in all directions, which could very easily indeed have caught fire. The fire was not caused by the electric wiring, and although sec. 612 of part 7, of chap. 113, of the Revised Statutes of Canada, 1906, was not carried out in that a certificate in writing from a competent electrical engineer had not been procured, still, the Court considers from all the evidence that the electrical gear on board this ship for all practical purposes was safe. The fire, in the opinion of the Court, did not start in the linen room, as by the evidence it was impossible for sparks to get in through the window of this room, as it had never been open during the trip.

As to the conduct of the officers and crew, and the question of responsibility as to the cause of the fire, although Capt. Stevens and Chief Engineer Cornish held the necessary certificates, it was brought out in the evidence that Capt. Stevens had never been in charge of a passenger vessel before, and although very possibly a good seaman, he did not fully appreciate the responsibility of having numbers of passengers under his charge, he held as before mentioned, the necessary certificate required by law, and this being the case, the Court does not attach blame to the company for placing him in the position of master. He gave his evidence in a slow but straightforward manner, and evidently did not understand the grave responsibility resting upon him as master of this vessel. From the moment he was first aroused from his cabin, he did nothing whatever; he had time, after be knew the ship was on fire, to partly dress himself, but he made no attempt to give any alarm, or to communicate with the engine room, but simply went into the wheel house and remained there till he went down to the main deck, and then proceeded to get over the bow on to the anchor chains, from which position he was rescued by a skiff. The Court frees him from any charge of cowardice, but consider that at the time of this terrible catastrophe he lost his head and was absolutely useless as master of the vessel, and therefore, considers that, for this reason, he is not a fit person to be in charge of a passenger steamer. The Court gives every credit to Mate Forrest; he kept his head, and did everything it was possible to do after the fire started, and the lives of at least four females were saved. He took the place of the captain, and endeavored to do everything that the master of the vessel should have done. In regard to the Chief Engineer, the conduct of this officer bears, in the opinion of the Court, a marked contrast to the conduct of the mate. On the first alarm of fire, this man seems to have left his cabin and proceeded to look after himself by getting on board the tug Idell, which was alongside, with the greatest promptitude, doing practically nothing to assist in saving life, and leaving the Premier when he must have known that one woman at least was in her stateroom.

The electric lighting of the vessel was under the control of the chief engineer, and during the time the dynamo was running, an engineer should have been on watch, and the chief engineer is responsible, though not holding him as responsible as the master, for the discipline of the ship; still, he was an officer of the vessel, and as such, should have assisted as far as he possibly could in looking after the passengers, and therefore the Court considers that he is not a fit person to be chief engineer of a passenger steamer. On the night in question there was only one person, a youth of 18, who could by any chance be supposed to be on duty; he was a fireman, and his instructions were to look after the engines and fires, but instead of attending to his duties he was in a cabin talking with two other men; the Court considers that if this man had been keeping a proper watch, the fire, in all probability would not have occurred, or at any rate, it would have been extinguished in the same way as the small fire was earlier in the evening, before any material damage was done. The fireman, Anderson, is guilty of misconduct, and an offence under section 358 of the act.

There were two tugs, the Frederick and Idell, in close proximity to the burning ship, and the court considers that something more than was done could have been done by these vessels, especially in the case of a man who was left to burn to death although the people on board the Idell heard him shouting from his cabin and made no effort to save him, also some time before the tug Frederick moved away, he was known to be in one of the stern cabins on the Premier and was heard shouting for help.

There was no fire drill or boat drill of any kind carried out on board the Premier, and the fact of having heavy cordwood piled up to the height of 3 ft. in front of the stairway on the main deck, is most improper, and on account of this it would no doubt have been difficult for any person coming down the

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie canals in September:

Articles.			Canadian Canal	U.S. Canal	Total
Copper	Eastbound	Net tons	926	12,076	13,002
Grain	"	Bushels	1,895,418	2,770,362	4,665,780
Building stone	"	Net tons	....	....	....
Flour	"	Barrels	282,600	412,260	694,860
Iron ore	"	Net tons	1,548,834	2,810,397	4,359,231
Pig iron	"	"	....	1,982	1,982
Lumber	"	M. ft. B.M.	4 019	63,196	67,215
Wheat	"	Bushels	5,868,091	8,677,494	14,545,585
General merchandise	"	Net tons	1,252	11,582	12,834
Passengers	"	Number	1,969	1,879	3,848
Coal, hard	Westbound	Net tons	13,545	56,208	69,753
Coal, soft	"	"	246,697	900,383	1,147,080
Flour	"	Barrels	100	....	100
Grain	"	Bushels	....	....	....
Manufactured iron	"	Net tons	16,813	16,815	33,628
Iron ore	"	"	....	....	....
Salt	"	Barrels	4,431	63,017	67,448
General merchandise	"	Net tons	37,533	49,627	87,160
Passengers	"	Number	1,938	1,288	3,226
Vessel passages		Number	711	1,523	2,234
Registered tonnage		Net	1,456,076	3,494,588	4,950,664
Freight—Eastbound		Net tons	1,807,672	3,297,969	5,105,641
" Westbound		"	315,231	1,032,486	1,347,717
Total freight		"	2,122,903	4,330,455	6,453,358

stairs to have escaped that way, the piling of cordwood in this position, the Court considers to be the fault of the officers of the ship, as the manager of the company had given most distinct instructions that it was not to be placed there, and these instructions had been disobeyed. There were no proper ship's articles kept on board, and the discipline, or rather the want of discipline, on board a vessel allowed to carry a large number of passengers, was most deplorable. After careful enquiry the Court is satisfied that the disaster is in no way attributable to want of sobriety by any person on board the Premier.

The work done by Constable Woods of the R.N.W.M.P. in endeavoring to assist in every possible way, when the buildings on the deck were on fire, is most commendable, more especially in having the presence of mind to carry a keg of gunpowder out of a building in close proximity to the fire and burying it in a safe place is considered by the Court to be highly creditable. The behavior of Mr. Humphrey, who was a passenger on board the ill-fated steamer, is commended upon very favorably by the Court, in that he went from the port to the starboard side of the vessel to rooms 10 and 12 through the smoke to endeavor to be of assistance to his fellow-passengers. The highly creditable conduct of the mate will be brought to the attention of the Minister of Marine, and the great presence of mind displayed by Constable Woods will be brought to his commanding officer's attention.

The certificates held by Capt. Stevens, master of the Premier, and Mr. Cornish, chief engineer of the vessel, are cancelled, as the Court considers that the hopeless want of discipline, and the lack of knowledge, or it may be carelessness in the way most important matters were attended to on board this vessel, is in a great measure the cause of the disaster.

At the close of the reading of the judgment, Commander Spain said that should Capt. Stevens apply for a certificate for a tug boat, his application would be favorably considered.

◆

Vessels Removed from the Register.—The following vessels were removed from the Canadian register during Sept., for the reasons assigned: Steam—Dolphin, Yarmouth, N.S., 3 tons, stranded; Premier, Winnipeg, 282 tons, burnt. Sailing—Ada Mildred, Pictou, N.S., 99 tons, stranded; Alice Maud, St. John, N.B., 120 tons, wrecked; Clorinthe, Quebec, 22 tons, out of existence; Corinto, Parrsboro, N.S., 97 tons, wrecked; Dido, Guysboro, N.S., 59 tons, lost; Dominion, Lunenburg, N.S., 96 tons, burnt; Ecossaise, Quebec, 23 tons, out of existence; Fanny, Charlottetown, 26 tons, broken up; Hermine, 20 tons, La Sorcière, 44 tons, Marie Emma, 30 tons; Marie Joseph; 43 tons, Ste. Anne, 54 tons; Seven Brothers, 28 tons; Virginie, 49 tons, all of Quebec, out of existence; Our Hope, Charlottetown, P.E.I., 53 tons, broken up.

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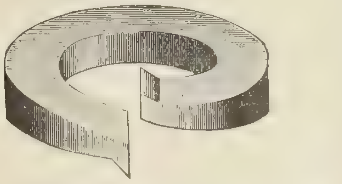
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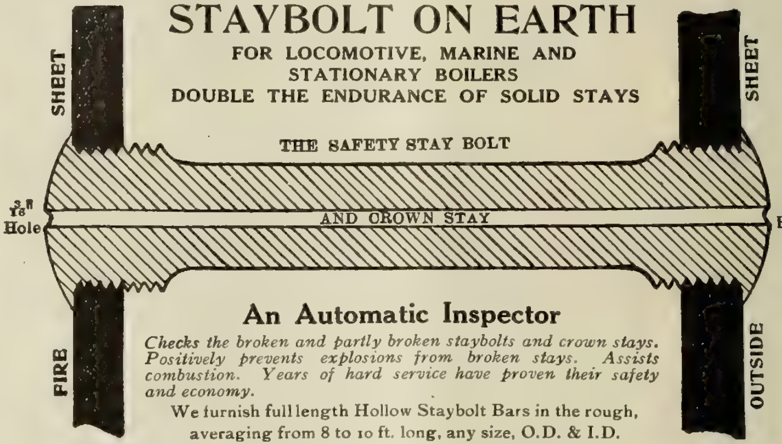

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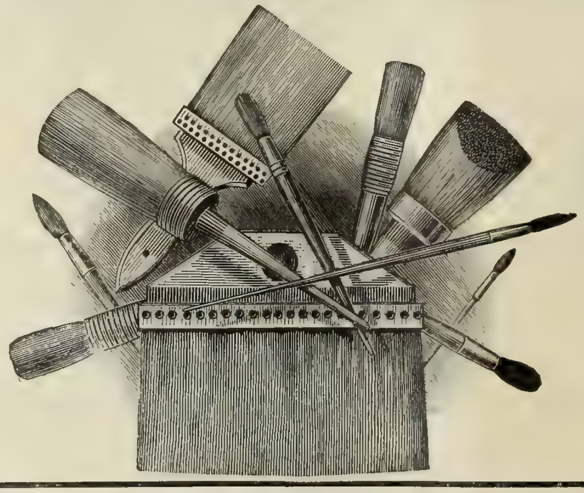
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Lake Grain Rates.

F. King, Secretary of the Dominion Marine Association, has sent the following letter to the Minister of Customs:

In view of many recent newspaper articles designed to create a public opinion that the Dominion Marine Association is involved in some sort of "combine" to maintain high rates for the carriage of grain, the result of which is to divert much of the export trade through United States ports, it is thought advisable that a brief statement of the facts should be made on the part of this Association, and I take the liberty of addressing this letter to you and of writing a similar one to the Minister of Marine, as the press has now undertaken to mention your names in connection with the proposal to break the alleged combine by admitting U.S. vessels to enter in the coasting trade of Canada. I would therefore say:

That this Association comprises in its membership practically all the vessels engaged on the inland waters of Canada, and whether carrying freight or passengers or both; and that the Association never did, and in fact could not, attempt to fix or enforce any rates for the carriage of any freight, any more than it could attempt to interfere in the cost of carriage of passengers.

Two or three years ago, and at a time when a scarcity of cargoes had led vessel owners to carry grain at an actual loss rather than take their boats out of commission, an arrangement was made by the owners of Canadian grain-carrying boats (who were naturally members of the Association named), that they would not carry at rates below certain minimums then agreed upon; the minimums varying with the seasons and general trade conditions and being fixed from time to time with a view to maintaining a rate that would give nothing more than a fair and reasonable profit. At times, shippers paid very much higher rates than the minimum, according to supply and demand, and this minimum was, I believe, always kept low enough so that it was no obstacle to grain being exported by this route.

From first to last, however, one governing principle has dominated the whole arrangement; it has always been agreed that the minimum from Lake Superior ports to Georgian Bay should be lowered or abandoned at once, so that it may never exceed the rates prevailing to Buffalo. From time to time a committee had power to take prompt action so that a Canadian rate could never exceed the corresponding rate in the United States; and at times the minimum was abandoned completely rather than incur any risk of forcing cargoes away from Canadian channels.

On June 2 last, long before the present newspaper discussion arose, the agreement was rescinded, and since that date there has been no limit or arrangement whatever regarding a minimum rate.

In any event, the rate charged by the lake vessel is only one factor in governing the route to be taken by grain on the way from the west to British or continental ports. The ocean rate is not mentioned by those who now accuse Canadian lake vessels of forcing the grain into U.S. channels. But the fact is that the excess in the ocean rate from Montreal over that from Atlantic ports, and also the additional insurance rate payable for the St. Lawrence River constitute very important factors in deciding the route for the grain. Another important feature is that any grain sent via the St. Lawrence must be exported before the close of navigation, as there is practically no outlet for grain in store east of Georgian Bay ports. It may be true that the cost of operating, the short season, and the additional risk justify this excess in the cost of export via Montreal, but it does not follow that the lake vessel is entirely at fault for any deviation of grain to the southern route.

I am further directed to say that members of the Executive Committee of this Association and members thoroughly conversant with the grain trade will be pleased to attend in Ottawa and give all the information possible, whenever I am notified that you would like to take the question up with them.

The following interview with a lake vessel owner appeared in the Toronto Globe recently: "We are being blamed for what should be laid to the charge of the ocean carriers. The rate per quarter for wheat from Montreal to Liverpool quoted to-day is 2s. 3d., or about 7c. per bushel. The rate from New York to Liverpool is 1s. 4d., or about 4c. per bushel. Is it any wonder that 5,000,000 bushels of our wheat is now being contracted for by way of Buffalo and New York?"

"Is the New York rate a paying one?"

"That is not the question at all. I suppose that any price obtained by the ocean liners may be regarded as a paying price, because the liners have to run, and would in many cases have to take in ballast if they could not get grain. The liners that go out of the St. Lawrence have more freight, relatively, and a greater variety offering, and, therefore, companies under the same management can quote prices on the St. Lawrence almost double those they accept via New York. Of course, insurance is said to be ¾c. per bushel more by the St. Lawrence, but terminal charges are the same in each case.

"Now, contrast these figures with our lake rates. We are getting an all-water rate of 6 to 7c. from Fort William to Montreal. The combined lake and rail to New York is, 1⅜c. Port Arthur to Buffalo, 5½c. rail Buffalo to New York, or 6⅞c. in all, practically the same as the all-water to Montreal. The combined lake and rail rate from Fort William to Montreal, via Georgian Bay, is 6¼c., of which the railway gets 5c. It, therefore, works out thus: Canadian wheat from Fort William to Liverpool, via Buffalo and New York, 10⅞c. per bushel; Canadian wheat from Fort William to Liverpool by Georgian Bay and rail to Montreal, 13¼c. As there will probably be 35,000,000 bushels moved out before the end of navigation, it is absolutely necessary that the ocean rates be equalized or the business will not be done through our own channels."

The "All-Red" Route.

In connection with the proposed Great Britain-Australasian service via Canada, the Hon. R. Lemieux, Postmaster-General, said recently: A few days ago an order-in-council was passed appointing Dr. Coulter, Deputy Postmaster-General, a special delegate to discuss with the Australian Government what should be the contribution of the Australian colonies towards the establishment of the proposed service. Not to speak of the immense saving of time which will take place in the delivery of mails, it is difficult to realize the enormous strategical advantage which Great Britain and her colonies, especially Canada, would derive from the All-Red Line. A close study of the scheme forces on the mind the conviction that this new Imperial route will prove itself to be a gigantic step in the direction of bringing together the scattered portions of the Empire. Canada will become the central point of the Empire, and the carrier of all the traffic between the Australian colonies and the mother country. She, in addition, will pour the contents of her granaries into Great Britain at the minimum of expense and of loss of time. The Australian colonies will also benefit, as the All-Red Line will bring them nearer to us in point of time. There cannot be two opinions as to the national necessity for this scheme. It is of vital importance to Great Britain and her colonies. As regards Canada, any national expenditure necessary to insure the success of this enterprise will be repaid a hundredfold, as she is bound to become the great carrier of the Empire and the granary of the world.

Among the Express Companies.

The Canadian Ex. Co.'s service is now in force on the recently opened portions of the G.T. Pacific Ry.

The Canadian Northern Ex. Co. has opened offices at Sudbury Jct., Ont.; Lena and Lorette, Man., and Aylesbury, Sask.

The American Ex. Co. has extended its service on the Duluth, Rainy Lake and Winnipeg Ry. to Fort Frances, Ont., and has opened an office there.

The Alaska Pacific Ex. Co.'s office at Prince Rupert, B.C., was wrecked recently, as the result of blasting operations during the construction of the G.T. Pacific Ry.

G. W. Waistell, heretofore cashier Dominion Ex. Co., Nelson, B.C., has been appointed agent at Rossland, B.C., and is succeeded by J. A. Lanigan, from the Calgary, Alta., office.

The Canadian Northern Ex. Co. has closed the following summer offices for the winter: Bala, Beaumaris, Hamill's Point, Morinus House, Port Cockburn, Port Sandfield, Rosseau, and Windermere, Ont.

The N.Y. State Public Service Commission had before it, Oct. 10, a complaint by residents of northern New York, alleging that they are compelled to pay exorbitant rates for packages sent short distances by the Canadian Ex. Co., operating over the G.T.R., and the American Ex. Co., operating over its connection, the Rome, Watertown and Ogdensburg division of the New York Central and Hudson River Rd. The establishment of a joint rate is asked for.

W. P. Stericker, whose appointment as Claims Agent, Canadian Ex. Co., at Montreal, was announced in our Oct. issue, was born at Whitby, Ont., June 6, 1866. He entered the Canadian Ex. Co.'s service there, Aug., 1881, since when he has been, to Sept., 1884, driver and clerk; Sept., 1884, to May, 1888, messenger; May, 1888, to Feb. 1, 1889, clerk in audit office, Montreal; Feb. 1, 1889, to Nov. 22, 1891, agent at Whitby, Ont., and also U.S. Consul for that district; Nov. 22, 1891, to Sept., 1895, agent at Oshawa, Ont., also G.T.R. outside ticket agent, G.N.W. telegraph agent, and U.S. Consular agent; Sept. 1, 1895, to Jan. 15, 1902, agent Oshawa Ry., Oshawa, Ont.; Jan. 15 to Dec. 31, 1902, assistant depot agent, Canadian, American and National Ex. Cos., Montreal; Jan. 1, 1903, to May 25, 1908, depot agent same companies, Montreal; May 25 to Oct. 1, 1908, assisting in general offices, Montreal.

Canadian Express Building, Montreal.

This building was illustrated in our March issue, and briefly described in our June number. Following is a more complete description:

It has a frontage on three streets, St. Paul, Place d'Youville and McGill, with the principal façade on McGill St., on which street it has a frontage of 113 ft., with a depth of about 80 ft. on the other two streets. It is 10 stories high above the basement and is of skeleton steel construction, faced on the three fronts with grey canyon Ohio sandstone, and with concrete floors and roof, making a thoroughly fireproof building. The style of architecture is modified French renaissance.

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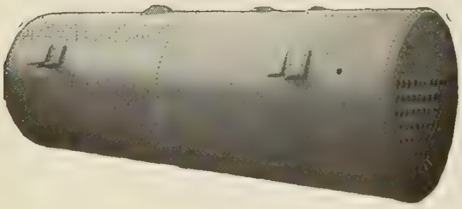

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Calgary, Alta. Winnipeg, Man.

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152 Craig St. West, MONTREAL

The first two floors and part of the third and the basement are occupied by the Canadian Express Co., the money order and shipping departments being on the ground floor, each department having a separate entrance from McGill St. The main entrance, which also gives an additional entrance to the money and shipping departments, as well as to the offices in the upper floors, is in the centre of the McGill St. front. Immediately opposite the main entrance are two high-speed hydraulic passenger elevators and a staircase leading to the several floors.

The entrance hall is finished from floor to ceiling in marble, the lower 10 feet being in a strongly veined Skyros marble, the upper four feet is Sienna inlaid with light colored Skyros. The floor is tiled in light grey Phillipsburg marble. The ceiling of this hall is richly decorated in plaster work and finished old silver. The stairs throughout have marble treads supported upon iron carriages and the sides of the stairs from the first to the second floor are finished with a dado of Skyros marble and the walls of the staircases in all the other floors with a dado of blue Vermont marble. The elevator, halls and corridors in the second and third floors also have dados of blue Vermont marble and floors of terraza with marble borders. The doors and finish throughout the building are of quartered white oak.

In rear of the Express Co.'s money order and shipping departments a driveway is carried from St. Paul St. to Place d'Youville, from which all express goods are received and delivered. The heating is by low pressure steam which is supplied from the G.T.R. office building on the opposite side of McGill St., the pipes being carried across below the street in a concrete tunnel. The light for the inside rooms of the building is obtained from a large light well, which is faced with enamelled white bricks, and in this well is placed a fire escape, access to which is had from the north and south half of the building on each floor. The toilet rooms are situated in rear of the elevators and open off the landings of the stairs between each floor. The fittings for the Express Co. on the ground floor are of very simple character, the fronts of the several counters and walls being lined with strongly marked Phillipsburg marble; marble from the the same quarries has been used in all the lavatories. Hutchison & Wood, Montreal, were the architects.

The 4th, 5th, 6th, and part of the 7th floors are being rented to tenants, a number of the offices having already been taken. On the 7th floor are several G.T.R. officials and their staffs, including the Customs Agent, Auditor of Passenger Accounts and Freight Claims Agent. The 8th floor is entirely devoted to the Auditor of Passenger Accounts Department. On the 9th floor are the G.T.R. Pension, Medical, General Purchasing, and Telegraph Departments, the Canada Atlantic Transit Co., and Ontario Car Ferry Co., and the telephone exchange. The 10th floor is reserved for the G.T.P. Telegraph Co.

Telegraph and Cable Matters.

C.N.R. telegraph offices have been opened at Lavalle, Ont.; Lena, Myrtle and Vassar, Man.; and Borden and Russell, Sask.

T. Fitzgerald, local manager, C.P.R. telegraph department, Calgary, Alta., was married recently to Miss M. Wetmore, Lancaster Heights.

R. Coombes, local manager, C.P.R. telegraph department, Nelson, B.C., and formerly Western Union Telegraph Co.'s operator at Halifax, N.S., was accidentally drowned at Nelson, B.C., recently.

The G.T. Pacific Telegraph Co. is operating a commercial telegraph service, serving the new towns which have sprung up on the route of the G.T.P.R. between Winnipeg, Man., and the present terminus at Wainwright, Sask.

The C.N.R. telegraph service has been placed in operation between Winnipeg and Regina. Test messages were dispatched Oct. 10 and the wires opened for business Oct. 12. Scott Griffin, Manager C.N. Telegraph Co., on his return to Toronto from his western tour, stated that further extensions would be made as soon as wires could be strung.

C.P.R. telegraph offices have been opened at Val Morin, Que.; Embro Village, Utopia, and Walkerton, Ont.; Kelloe, Schwitzer Jct., Stockton and Treesbank, Man.; Boharm, Brownlee, Eyebrow, Lajard, Osage, Tugaske, Tuxford and Waldeck, Sask. The offices at Cheltenham, Embro Station, Pelton and Thamesville, Ont., and Balmoral, Man., have been closed.

G. Marconi announced recently that the plant at Glace Bay, N.S., and Clifden, Ireland, was being duplicated, so that there would be no interruption of service in the event of a breakdown. It is anticipated that the work will be completed by the end of the year. He also stated that when the Atlantic stations are fully equipped, attention would be directed to the Pacific service.

The Great Northwestern Telegraph Co.'s annual meeting of shareholders was held in Toronto Sept. 30. Following are the officers and directors for the current year: President, H. P. Dwight, Toronto; Vice-President, A. Brown, Hamilton; Vice-President and General Manager, I. McMichael, Toronto; Directors, H. N. Baird, J. Hedley, Hon. J. K. Kerr, W. C. Mathews, Toronto; R. C. Clowry, J. B. Van Every, New York; Secretary-Treasurer, G. D. Perry; Auditor, A. C. McConnell.

The Dominion Department of Marine is about to erect four additional wireless telegraph stations on the Pacific coast. Col. Anderson, Chief Engineer of the Marine Department, has recently visited the coast, with a view to the selection of sites for that purpose. It is announced that one of the stations will be erected at Prince Rupert, one between Prince Rupert and Vancouver, and two on Queen Charlotte Islands. It has been announced that these extensions will not be undertaken this year.

Sir Samuel Canning, who died in England, Sept. 24, aged 85, was in early life engaged on the engineering staff of the Great Western Ry. there, and subsequently engaged in the construction of cable lines. In 1856 he was connected with the laying of the cable between Cape Breton and Newfoundland, and in 1857 was one of the chief assistant engineers in charge of the laying of the Atlantic cable. In 1865 he became connected with the Telegraph Construction and Maintenance Co., remaining with it for a number of years.

Following are the officers of the Old Time Telegraphers' and Historical Association,

E. B. LEIGH,
Pres. & Gen. Mgr.

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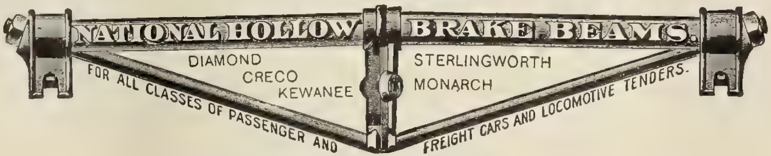
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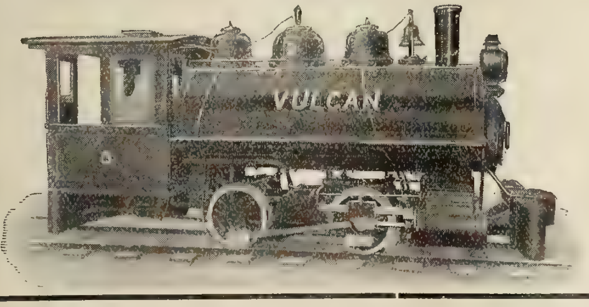

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JAMES PLAYFAIR, Pres. & Gen'l Mgr. D. L. WHITE, Vice-President. J. W. BENSON, Sec'y-Treas.
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elected at the recent annual reunion at Niagara Falls, N.Y.: President, E. B. Saylor, Superintendent Western Union Telegraph Co., Pittsburg, Pa.; Vice-President, C. E. Bagley, Superintendent Postal Telegraph Cable Co., Pittsburg, Pa.; Second Vice-President, W. J. Camp, Electrical Engineer, C.P.R. Telegraphs, Montreal; Secretary-Treasurer, F. J. Scherrer, Secretary to the President, Western Union Telegraph Co. Among those from Canada at the meetings were: I. McMichael, Vice-President and General Manager Great Northwestern Telegraph Co., Toronto, and wife; W. J. Camp, Electrical Engineer,

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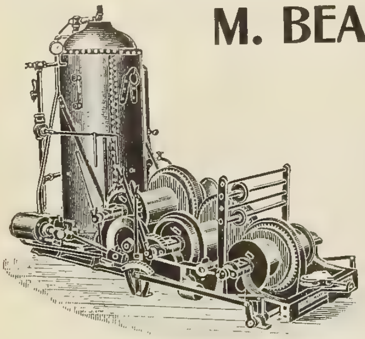

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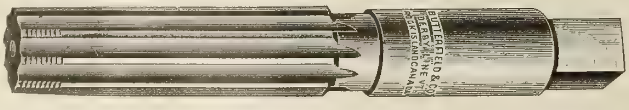

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On first and third Tuesdays each month until further notice through tourist sleeping car without change, Chicago to Houston, Texas, leaving 6 p.m., on above Tuesdays. Very low abnormal rates, "Homeseekers," as for instance, Chicago to Houston and return, $25.00; New Orleans the same, good 30 days. Special homeseekers' round trip rates to the South and Southwest.

Tourist rates to Arizona, Mexico, and California, liberal stopover privileges. Rates via New Orleans as low as via any other route.

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W. H. HENRY, Can. Pass. Agent,
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A. A. HEARD, Gen. Pass. Agent,
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James Hutton & Co., Montreal.

C.P.R. Telegraphs, Montreal, and wife; L. B. McFarlane and wife, Montreal; L. H. Humes and wife, Montreal; and P. W. Snider, Superintendent C.P.R. Telegraphs, and wife, St. John, N.B.

Hon. R. Lemieux, Postmaster-General, in a recent speech, in referring to the Pacific cable, said, after the laying of the Pacific cable, its effect on the rates for messages between Great Britain, and between the U.S., and Australia, were at once manifest. The rate between Great Britain and Australia was reduced from 4s. 9d. a word to 3s. a word, and from something like 6s. a word between the U.S. and Australia to about 2s. 6d. a word. But Canada, though the chief promoter of the scheme and a five-eighteenth contributor to its maintenance, has had nothing from it but the satisfaction of promoting Imperial interests. It is true that the Canadian rate to Australia was reduced to 2s. a word, but the business remains insignificant, and the rate between Canada and Great Britain was not affected by the Pacific cable. Speaking for myself, and myself only, I believe that the time has come when cheaper rates should be possible between Great Britain and Canada. I am an advocate of a ten-words cablegram for a shilling, and with the tremendously large amount of business which exists between Canada and Great Britain, such a reduction should soon be made possible.

Pacific Cable Board.

The report for the year ended Mar. 31 shows total receipts of £172,522 12s. 4d., and a deficiency of £62,362, 10s. 0d., which is recoverable as follows: From Great Britain, £17,322 18s. 4d.; Canada, £17,322, 18s. 4d.; Australia, £20,787 10s. 0d.; New Zealand, £6,929 3s. 4d. Compared with the previous year there was a decrease of £2,852 15s. 2d. in gross receipts, and an increase of £4,082 13s. 0d. in expenditure; of this, £2,027 16s. 0d. being due to insurance on the cable ship, a portion of which may eventually be recovered. Expenditure on maintenance and operation, including £32,000 carried to renewal account, and £1,511 3s. 8d. contributed to the provident fund, amounted to £94,977 14s. 4d., or £15,182 8s. 0d. less than the net revenue earned. The total contributions to the renewal fund, including interest, now amount to £198,836 12s. 11d., of which sum £12,500 is represented by spare cable. The estimated deficit for the current year is placed at £69,566.

The land lines in Australia and New Zealand have been well maintained by the governments concerned. The Atlantic companies have afforded uninterrupted cable communication throughout the year, and a rapid and efficient service. In Canada the C.P.R. lines in Vancouver Island and elsewhere suffered considerable interruption, first from bush fires and unusual electrical disturbances in July, Aug. and Sept., and later from severe storms in Nov. and Dec. In the latter month, a gale occurred in Vancouver Island which is said to have been the worst on record in that region, and caused an interruption of over 70 hrs., all the wires having been thrown down. In Aug., moreover, the traffic, more especially that to the States, was considerably disorganized by reason of the strike of telegraph operators in Chicago, and the sympathy it excited among those employed by the C.P.R.

The health of the staff has been satisfactory throughout the year, and the service rendered by them has continued to be maintained on the high level of efficiency and zeal which has characterized it in previous years. Throughout the year the cable has worked without interruption, and no repairs have been called for. The buildings, electrical apparatus, and plant, at all stations, have been maintained in good order. No damage has occurred to the repairing vessel Iris, and the discipline and efficiency of the ship's company have continued to be thoroughly satisfactory. The wharf and shed, which the New Zealand Government undertook to provide for her use at Auckland were completed in Jan. last, and permanent moorings for the vessel are being supplied.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Aerated Waters
E. L. Drewry.......................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co...................Toronto.
Canadian Westinghouse Co......Hamilton, Ont.

Ales
E. L. Drewry.......................Winnipeg.

Alloys
Goldschmidt Thermit Co..............Toronto.

Angle Bars
Hamilton Steel & Iron Co.......Hamilton, Ont.

Anti Rail Creepers
Belle City Malleable Iron Co.......Racine, Wis.

Automobiles
Polson Iron Works, Ltd..............Toronto.

Axes
James Smart Mfg. Co...........Brockville, Ont.

Axe Steel
Montreal Steel Works................Montreal.

Axles
James Hutton & Co...................Montreal.
Jas. W. Pyke & Co...................Montreal.
Rhodes, Curry & Co..............Amherst, N.S.

Badges
R. Woodman Mfg. & Supply Co...Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co...Boston, Mass.

Beacons
International Marine Signal Co........Ottawa.

Bearings, Side
Cardwell Mfg. Co..................Chicago, Ill.
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co........Montreal.

Blankets and Bedding
The Hudson's Bay Co.......................

Blasting Powder
Standard Explosives Limited..........Montreal.

Boilers
Babcock & Wilcox (Ltd.)..............Montreal.
Canada Foundry Co...................Toronto.
Jno.McDougall,Caledonian IronWorks Co.Montreal
Polson Iron Works...................Toronto.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Portable
Canada Foundry Co...................Toronto.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co., Ltd........Amherst, N.S.

Boiler Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Water Tube
Babcock & Wilcox (Ltd.)..............Montreal.
Jno.McDougall Caledonian IronWorks Co.Montreal
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Tubes
Jas. W. Pyke & Co...................Montreal.

Bolsters
Dominion Car and Foundry Co.........Montreal.

Bolts, Bridge
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited.....................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co.........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.........Montreal.
N. J. Holden Co., Ltd................Montreal.
Railway Materials Co..........New York City.

Brass and Copper Cloth
The B. Greening Co.............Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited...............Toronto.

Bridges
Canada Foundry Co...................Toronto.
Canadian Bridge Co..........Walkerville, Ont.
Dominion Bridge Co..................Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd..........Montreal.

Bumping Posts
McCord & Co......................Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co..New York.

Buoys
International Marine Signal Co........Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co................Montreal.

Caps
W. H. Coddington..............Hamilton, Ont.

Car Castings
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Car Cleaner
Modoc Soap Co...............Philadelphia, Pa.

Car Closets
Duner Co.........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd................Montreal.

Car Heating
Wm. C. Baker Heating & Supply Co..New York.
Canadian Gold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Lighting
Canadian Cold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
R. Woodman Mfg. & Supply Co...Boston, Mass.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd................Montreal.
F. H. Hopkins & Co..................Montreal.

Car Seals
R. Woodman Mfg. & Supply Co....Boston, Mass.

Car Wash Brushes
Wolfe Brush Co..................Pittsburg, Pa.

Cars
American Car and Equipment Co....Chicago, Ill.
Canada Car Co. (Ltd.)................Montreal.
Canadian Fairbanks Co. Ltd..........Montreal.
Crossen Car Mfg. Co..............Cobourg, Ont.
Dominion Car and Foundry Co........Montreal.
Hart-Otis Car Co. (Ltd.).............Montreal.
Hotchkiss, Blue & Co..............Chicago, Ill.
Ottawa Car Co., Ltd...................Ottawa.
Preston Car and Coach Co., Ltd...Preston, Ont.
Rhodes, Curry & Co..............Amherst, N.S.

Car Windows
O. M. Edwards..................Syracuse, N.Y.

Castings
Crossen Car Mfg. Co..............Cobourg, Ont.
Standard Steel Works Co......Philadelphia, Pa.

Castings, Brass
Canadian Bronze Co..................Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co..............Walkerville, Ont.

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MARINE Lamps, Search Lights and Supplies.
ELECTRIC Reflectors for Store Lighting.

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Canadian Iron and Foundry Co.........Montreal.
Kerr Engine Co.........Walkerville, Ont.

Castings, Iron and Steel
American Brake Shoe & F'dry Co—Mahwah, N.J.

Castings, Malleable
Taylor & Arnold.........Montreal.

Castings, Steel
Canadian Iron and Foundry Co.........Montreal.
Montreal Steel Works.........Montreal.
Rhodes, Curry & Co.........Amherst N.S.

Cast-Steel Hammers
American Brake Shoe & F'dry Co. .Mahwah, N.J.

Cast Steel Track Tools
American Brake Shoe & F'dry Co. .Mahwah, N.J.

Cast Steel Wrenches
American Brake Shoe & F'dry Co. .Mahwah, N.J.

Cement Machinery
Jas. W. Pyke & Co.........Montreal.

Chains
B. J. Coghlin & Co.........Montreal.

Charcoal Iron Staybolt Bars
Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Clevis Nuts
Cleveland City Forge & Iron Co....Cleveland, O.

Coal Haulage Ropes
The B. Greening Co.........Hamilton, Ont.

Compressors, Air
Canadian Rand Co.........Montreal.

Concrete Mixers and Rock Crushers
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co.........Montreal.
Mussens Limited.........Montreal.
Toronto Pressed Steel Co.........Toronto.

Contractors' Machinery and Plant
American Car and Equipment Co....Chicago, Ill.
American Hoist and Derrick Co...St. Paul, Minn.
M. Beatty & Sons.........Welland, Ont.
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co.........Montreal.
Mussens Limited.........Montreal.
Toronto Pressed Steel Co.........Toronto.

Contractors' Supplies
F. H. Hopkins & Co.........Montreal.
Rice Lewis & Son.........Toronto.
Toronto Pressed Steel Co.........Toronto.

Conveyors, Coal and Ash
Babcock & Wilcox (Ltd.).........Montreal.

Copying Presses
James Smart Mfg. Co.........Brockville, Ont.

Corrugated Furnaces
Continental Iron Works.........Brooklyn, N.Y.

Counter Dusters
Wolfe Brush Co.........Pitttburg, Pa.

Couplers, Car and Locomotive
Acme Railway Equipment Co. .Philadelphia, Pa.
Dominion Car and Foundry Co.........Montreal.
Latrobe Steel & Coupler Co....Philadelphia, Pa.
McConway & Torley Co.........Pittsburg, Pa.
National Malleable Castings Co. .Cleveland, Ohio.
Taylor & Arnold.........Montreal.
Washburn Steel Castings & Coupler Co.,
.........Minneapolis, Minn.

Cranes
Canadian Fairbanks Co., Ltd.........Montreal.

Cranes, Electric
Babcock & Wilcox......... Montreal.
Canada Foundry Co.........Toronto.
Dominion Bridge Co.........Montreal.
Mussens Limited.........Montreal.

Cranes, Locomotive
American Hoist and Derrick Co....St. Paul, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co.........Toronto.

Cross Arm Braces
Canadian General Electric Co.........Toronto.
Toronto Bolt and Forging Co.........Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co....Toronto.

Crowbars
B. J. Coghlin & Co.........Montreal.
Toronto Bolt and Forging Co.........Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co..Hamilton.

Cuts
Acton Burrows Limited.........Toronto.

Derailing Devices
Hayes Track Appliance Co.........Geneva, N.Y.

Derrick Ropes
Dominion Wire Rope Co.........Montreal.
The B. Greening Co.........Hamilton, Ont.

Derricks
American Hoist and Derrick Co....St. Paul, Minn.
M. Beatty & Sons.........Welland, Ont.
Miller Bros. & Toms.........Montreal.
Mussens Limited.........Montreal.

Dies
Butterfield & Co.........Rock Island Que.

Diving Outfits
John Date.........Montreal.
Mussens Limited.........Montreal.

Doors (Ex-Platform Trap)
O. M. Edwards.........Syracuse, N.Y.

Door Signs
Acton Burrows Limited.........Toronto.

Draft Gear
Cardwell Mfg. Co.........Chicago, Ill.
Farlow Draft Gear Co.........Baltimore, Md.
McCord & Co.........Chicago, Ill.
Standard Coupler Co.........New York City.

Drawing Materials
James Foster.........Toronto.

Dredges
M. Beatty & Sons.........Welland, Ont.

Drills
W. Abbott.........Montreal.

Drills, Air
Canadian Rand Co.........Montreal.

Dry Goods
The Hudson's Bay Co.........

Dump Cars (Contractors')
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co.........Montreal.
Toronto Pressed Steel Co.........Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co. . Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.).........Montreal.

Electric Car Route Signs
Acton Burrows Limited.........Toronto.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co. .Mahwah, N.J.

Electrical Fuses
Standard Explosives Limited.........Montreal.

Enameled Iron Signs
Acton Burrows Limited.........Toronto.

Engines, Automatic
Robb Engineering Co., Limited....Amherst, N.S.

Engines, Corliss
Robb Engineering Co., Limited.... Amherst, N.S.

Engines, Gasolene
Canadian Fairbanks Co.........Montreal.
Ontario Wind Engine and Pump Co.....Toronto.

Engines, Hoisting
American Hoist and Derrick Co...St. Paul, Minn.
M. Beatty & Sons.........Welland, Ont.
Canadian Fairbanks Co., Ltd.........Montreal.

Engines, Stationary and Marine
Polson Iron Works.........Toronto.
Robb Engineering Co., Limited...Amherst, N.S.

Explosives
Standard Explosives Limited.........Montreal.

Express Office Signs
Acton Burrows Limited.........Toronto.

Feedwater Heaters
Robb Engineering Co., Limited....Amherst, N.S.

Fencing
Canada Foundry Co.........Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co. .Owen Sound, Ont.

Fire Brick
Mussens Limited.........Montreal.

Flags
The Hudson's Bay Co.........

Flour
The Hudson's Bay Co.........

Fog Signals
International Marine Signal Co.........Ottawa.

Forgings
Canada Car Co., Limited.........Montreal.
Cleveland City Forge & Iron Co....Cleveland, O.
Crossen Car Mfg. Co.........Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.
Standard Steel Works Co.....Philadelphia, Pa.

Foundry Appliances
Goldschmidt Thermit Co.........Toronto.

Fuse Batteries
Standard Explosives Limited.........Montreal.

Fuse Detonators
Standard Explosives Limited.........Montreal.

Gaskets
McCord & Co.........Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co..Hamilton.

Gates
Canada Foundry Co.........Toronto.
McGregor Banwell Fence Co....Walkerville, Ont.
Owen Sound Wire Fence Co. .Owen Sound, Ont.

Glue Brushes
Wolfe Brush Co.........Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co.........Chicago, Ill.

Groceries
The Hudson's Bay Company.........

Hammers
James Smart Mfg. Co.........Brockville, Ont.

Handcars
Canadian Fairbanks Co., Ltd.........Montreal.
Crossen Car Mfg. Co.........Cobourg, Ont.
F. H. Hopkins & Co.........Montreal.
Mussens Limited.........Montreal.
Rice Lewis & Son.........Toronto.
Toronto Pressed Steel C.........Toronto.

Hardware
The Hudson's Bay Co.........
Rice Lewis & Son.........Toronto.

Hats
W. H. Coddington.........Hamilton, Ont.

Headlights
The N. L. Piper Railway Supply Co....Toronto.
Pyle National Electric Headlight Co. .Chicago, Ill.

Headlinings
Crossen Car Mfg. Co.........Cobourg, Ont.

Hoisting Machinery
American Hoist and Derrick Co. .St. Paul, Minn.
Brown Hoisting Machinery Co. .Cleveland, Ohio.
Canadian Fairbanks Co., Ltd.........Montreal.

Hoists, Electric
American Hoist and Derrick Co....St. Paul, Minn.

Hoists (Pneumatic)
Taylor & Arnold.........Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co.........Chicago, Ill.

Hydrants
Canadian Fairbanks Co., Ltd.........Montreal.
Kerr Engine Co.........Walkerville, Ont.

Illustrations
Acton Burrows Limited.........Toronto.

Inspections
R W. Hunt & Co.........Montreal.

Instruments, Surveying and Engineering
James Foster.........Toronto.

Interlocking Plant and Signals
Montreal Steel Works.........Montreal.
Saxby and Farmer Ltd.........Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.

Iron, Pig
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.

Iron Signs
Acton Burrows Limited.........Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Jacks
Canadian Fairbanks Co., Ltd.........Montreal.
H and E Lifting Jack Co.........Waterville, Que.
F. H. Hopkins & Co., Ltd.........Montreal.
Mussens Limited.........Montreal.
A. O. Norton.........Coaticook, Que.
James Smart Mfg. Co.........Brockville, Ont.

Japans
McCaskill, Dougall & Co.........Montreal.

Journal Bearings
Canadian Bronze Co.........Montreal.
Crossen Car Mfg. Co.........Cobourg, Ont.
Kerr Engine Co.........Walkerville, Ont.
Jas. W. Pyke & Co.........Montreal.

Journal Boxes
N. J. Holden Co., Ltd.........Montreal.
McCord & Co.........Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co.........Pittsburg, Pa.

Lager Beer, &c.
E. L. Drewry.........Winnipeg.

Lamps, Incandescent
Canadian Westinghouse Co.....Hamilton, Ont.

Lamps and Lanterns
The Hudson's Bay Company.........
The Hiram L. Piper Co.........Montreal.
The N. L. Piper Railway Supply Co....Toronto.

Launches
Polson Iron Works.........Toronto.

Lights, Contractors' and Wrecking
Canadian Fairbanks Co., Ltd.........Montreal.
F. H. Hopkins & Co.........Montreal.
Mussens Limited.........Montreal.

Locomotive Cranes
American Hoist and Derrick Co....St. Paul, Minn.

Locomotive Driver Brake Shoe
American Brake & Shoe F'dry Co. .Mahwah, N.J.
Canadian Iron and Foundry Co.........Montreal.

Locomotive Gauges
Taylor & Arnold.........Montreal.

Locomotive Lagging and Covering
Taylor & Arnold.........Montreal.

Locomotive Pop Valves
- Taylor & Arnold......Montreal.

Locomotives (Compressed Air)
- Burnham, Williams & Co......Philadelphia, Pa.
- Canadian Locomotive Co......Kingston, Ont.
- Montreal Locomotive Works (Ltd.)......Montreal.
- H. K. Porter Co......Pittsburg, Pa.

Locomotives (Geared)
- Lima Locomotive Co......Lima, O.

Locomotives (Electric)
- Burnham, Williams & Co......Philadelphia, Pa.
- Canada Foundry Co......Toronto.
- Montreal Locomotive Works (Ltd.)......Montreal.

Locomotives (Logging)
- Burnham, Williams & Co......Philadelphia, Pa.
- Canadian Locomotive Co......Kingston, Ont.

Locomotives (Rack)
- Burnham, Williams & Co......Philadelphia, Pa.
- Canadian Locomotive Co......Kingston, Ont.
- Montreal Locomotive Works (Ltd.)......Montreal.

Locomotives (Steam)
- American Car and Equipment Co......Chicago, Ill.
- Burnham, Williams & Co......Philadelphia, Pa.
- Canada Foundry Co......Toronto.
- Canadian Fairbanks Co., Ltd......Montreal.
- Canadian Locomotive Co......Kingston, Ont.
- Hotchkiss, Blue & Co......Chicago, Ill.
- Lima Locomotive Co......Lima, O.
- Montreal Locomotive Works (Ltd.)......Montreal.
- H. K. Porter Co......Pittsburg, Pa.
- Vulcan Iron Works......Wilkesbarre, Pa.

Locomotive Staybolts
- Falls Hollow Staybolt Co. . Cuyahoga Falls, Ohio.
- Flannery Bolt Co......Pittsburg, Pa.

Lubricators
- McCord & Co......Chicago, Ill.
- Taylor & Arnold......Montreal.

Lumber
- Parry Sound Lumber Co......Toronto.

Machine Tools
- W. Abbott......Montreal.

Machinery, Power
- Jno. McDougall Caledonian IronWorks Co. Montreal

Machinery Special
- Miller Bros. & Toms......Montreal.

Machinery, Transmission
- Miller Bros. & Toms......Montreal.

Machinery, Wood and Iron Working
- Canadian Fairbanks Co., Ltd......Montreal.

Manganese Steel Castings
- Montreal Steel Works......Montreal.

Manhole Frames and Covers
- American Brake Shoe & F'dry Co. . . Mahwah, N.J.
- Canadian Iron and Foundry Co......Montreal.

Marine Repairs
- Goldschmidt Thermit Co......Toronto.

Marine Supplies
- Rice Lewis & Son......Toronto.

Measuring Tapes
- Lufkin Rule Co......Saginaw, Mich.

Metals
- Goldschmidt Thermit Co......Toronto.

Milepost Numbers
- Acton Burrows Limited......Toronto.

Milling Cutters
- W. Abbott......Montreal.

Motors
- Canadian Fairbanks Co., Ltd......Montreal.
- McCord & Co......Chicago, Ill.

Nickel
- The Orford Copper Co......New York.

Nickel for Nickel Steel
- The Orford Copper Co......New York.

Numbers
- Acton Burrows Limited......Toronto.

Nut Locks
- Dinning & Eckenstein......Montreal.
- Positive Lock Washer Co......Newark, N.J.

Nuts, Square and Hexagon
- Canada Foundry Co......Toronto.
- Toronto Bolt and Forging Co......Toronto.

Oakum
- The Hudson's Bay Company......

Office Fittings
- Canadian Office & School Furniture Co. Preston, Ont.

Office Signs
- Acton Burrows Limited......Toronto.

Oil Furnaces
- Railway Materials Co......New York City.

Oil Tanks
- S. F. Bowser & Co., Limited......Toronto.

Oils
- Canadian Oil Co......Toronto.
- Galena Signal Oil Co. . Franklin, Pa., and Toronto.

Packing
- Canadian Fairbanks Co., Ltd......Montreal.
- The N. L. Piper Railway Supply Co......Toronto.

Paint Brushes
- Wolfe Brush Co......Pittsburg, Pa.

Painters' Dusters
- Wolfe Brush Co......Pittsburg, Pa.

Painters' Scrubs
- Wolfe Brush Co......Pittsburg, Pa.

Painters' Wall Brushes
- Wolfe Brush Co......Pittsburg, Pa.

Paints
- Canadian Oil Co......Toronto.

Pinch Bars
- The N. L. Piper Railway Supply Co......Toronto.

Pipe and Pipe Coverings
- Wm. C. Baker Heating & Supply Co. . New York.

Pipe Stocks
- Butterfield & Co......Rock Island, Que.

Platforms, Steel
- Standard Coupler Co......New York City.

Ploughs, Contractors'
- Mussens Limited......Montreal.
- Toronto Pressed Steel Co......Toronto.

Pneumatic Tools
- N. J. Holden Co., Ltd......Montreal.

Porter
- E. L. Drewry......Winnipeg.

Portable Boilers
- Babcock & Wilcox (Ltd.)......Montreal.

Printing
- The Hunter-Rose Co......Toronto.
- The Mail Job Printing Company......Toronto.

Pumps
- S. F. Bowser & Co., Limited......Toronto.
- Canadian Fairbanks Co......Montreal.
- Canada Foundry Co......Toronto.
- Ontario Wind Engine and Pump Co......Toronto.
- James Smart Mfg. Co......Brockville, Ont.

Pumps (Centrifugal)
- M. Beatty & Sons......Welland, Ont.

Rail Benders, Roller
- F. H. Hopkins & Co......Montreal.
- Montreal Steel Works......Montreal.

Rails (new)
- Dominion Iron & Steel Co......Sydney, N.S.
- Drummond, McCall & Co......Montreal.
- J. J. Gartshore......Toronto.
- F. H. Hopkins & Co......Montreal.

Rails (for relaying)
- F. H. Hopkins & Co......Montreal.
- J. J. Gartshore......Toronto.
- Mussens Limited......Montreal.
- Jas. W. Pyke & Co......Montreal.

Rail Joints
- Goldschmidt Thermit Co......Toronto.
- The Rail Joint Co. of Canada......Montreal.

Railway Pile Drivers
- F. H. Hopkins & Co......Montreal.
- Mussens Limited......Montreal.

Railway Supplies
- Canadian Fairbanks Co......Montreal.
- The Hiram L. Piper Co......Montreal.
- The N. L. Piper Railway Supply Co......Toronto.
- Rice Lewis & Son......Toronto.

Reamers
- W. Abbott......Montreal.
- Butterfield & Co......Rock Island, Que.

Rivets, Boiler, Bridge and Structural
- Toronto Bolt and Forging Co......Toronto.

Rolled Wheels
- Standard Steel Works Co......Philadelphia, Pa.

Roof Trusses
- Canadian Bridge Co......Walkerville, Ont.
- Dominion Bridge Co......Montreal.

Rope
- F. H. Hopkins & Co......Montreal.
- The Hudson's Bay Co......

Rotary Snow Ploughs
- Crossen Car Mfg. Co......Cobourg, Ont.

Sash Balances
- O. M. Edwards......Syracuse, N.Y.

Sash Locks
- O. M. Edwards......Syracuse, N.Y.

Saw Steel
- Montreal Steel Works......Montreal.

Scales
- Canadian Fairbanks Co., Ltd......Montreal.

Scoria Blocks
- W. H. Knowlton......Toronto.

Scrapers (Wheel and Drag)
- F. H. Hopkins & Co......Montreal.
- Mussens Limited......Montreal.
- Toronto Pressed Steel Co......Toronto.

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See Purchasing Agents' Guide on page 909

See Alphabetical Index to Advertisements on page 875.

THE
Railway and Marine World
With which are incorporated The Western World and
The Railway and Shipping World, Established 1890
Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' interests

Old Series, No. 212.
New Series, No. 130.
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ELECTRIFICATION OF THE ST. CLAIR TUNNEL.

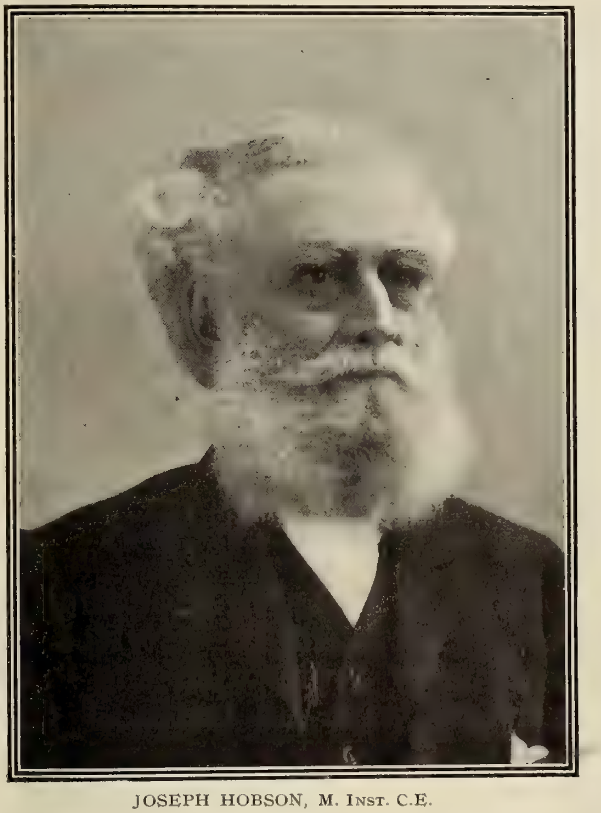
The St. Clair tunnel was opened for traffic in 1890, by the St. Clair Tunnel Co., organized as a subsidiary company to the G.T.R. Co. The tunnel, located under the St. Clair River, is the connecting link between the terminal of the Eastern Division at Sarnia, Ont., and the Western Division at Port Huron, Mich. The length of the tunnel from portal to portal is 6,032 ft. The open tunnel approaches are of considerable magnitude, that on the Port Huron side being slightly over 2,500 ft. long, while that on the Sarnia side is nearly 3,300 ft. long, the total distance between the Canadian and U.S. summits being 12,000 ft., or about 2¼ miles. The grade on the tunnel approaches and the inclined sections of the tunnel is 2%, while the flat middle section of the tunnel, about 1,700 ft. long, has a grade of 0.1% downward toward the east, just enough to provide for the proper drainage of any seepage water.

A single track extends through the tunnel, while a double track is laid in both of the approaches. The necessary tracks for handling the freight and passenger traffic are provided in the yards at Sarnia and Port Huron. The map and profile of the zone operated by the St. Clair Tunnel Co. is shown in an accompanying illustration. The tracks in the yards and on the tunnel approaches are shown on a larger scale in the same drawing.

The tunnel shell consists of cast iron rings built up in sections, the inside diameter being about 19 ft. The hydraulic shield was used in advancing the bore from each of the tunnel portals, by which means the entire work of construction was carried on with reasonable expedition. A vertical shaft was sunk near the bank of the river on both the Canadian and U.S. sides.

The disposal of the rainfall on the tunnel approaches required particular attention. The areas of the Port Huron and Sarnia approaches are approximately 11 and 13 acres respectively. Water precipitated on these areas during a rainfall is discharged into waste ditches on the bank above by means of pumps of large capacity. Retaining levees have been constructed, so arranged as to impound a large proportion of the water falling on the approaches. By this method the pumps have to handle only the water falling on the central portion of the approach during the rainstorm. Later the impounded water is discharged into the pump sump by valves provided for the purpose. As is evident, this pumping service is of great importance in the operation of the tunnel, as, should the tunnel become flooded with water, entire interruption of the traffic would ensue. For the operation of the steam drainage pumps, boiler plants were provided at each portal, and attendants were constantly on duty, it being necessary to keep up steam during a large part of the year in order to take care at a moment's notice of any rainfall that might occur.

Four steam locomotives of special design had been in commission for handling the freight and passenger traffic since the construction of the tunnel. They were designed to provide the necessary high tractive effort required to operate the trains over the grades in the tunnel and on the approaches, and arranged to burn anthracite coal, in order to minimize the inconvenience due to excessive smoke in the tunnel. These locomotives have given good account of themselves, and have handled the traffic in a satisfactory way throughout their service. Their maximum tractive effort limited the weight of the trains handled to about 760 tons, and even with this load the speed up the 2% grade was often very slow. With the constantly increasing traffic, at times the capacity of the tunnel with its steam equipment was taxed in handling the tonnage delivered to the tunnel company by the adjacent divisions of the G.T.R., and it was thought desirable to make such changes in the operation of the tunnel as would increase its possible capacity for handling traffic, and at the same time obviate the danger and inconvenience due to the presence of the locomotive gases in the tunnel.



JOSEPH HOBSON, M. INST. C.E.
Consulting Engineer G.T.R. and Chief Engineer St. Clair Tunnel Co. from its organization to the completion of the work.

The advantage of the use of electric locomotives, on account of the freedom from smoke and the attendant discomfort, together with the possible greater economy in operation, led finally to the decision to provide an electrical equipment to handle the tunnel service, this equipment to provide for the operation of the trains through the tunnel by means of electric locomotives; the handling of the drainage and seepage water by means of electric pumps; the lighting of the passenger stations, the tunnel and the roundhouses by electricity, as well as furnishing a certain amount of power to the roundhouses; also, provision was made for a limited amount of outside lighting in the form of arc lamps. The different electrical systems available for such service were considered, and estimates as to the relative cost and efficiency of the various systems were prepared and submitted to the tunnel company. These estimates covered the direct current system both with and without battery, as well as estimates on the alternating current systems. Complete specifications were prepared, covering both the direct and alternating current systems, and propositions on these received and considered. The specifications stipulated, in addition to various guarantees regarding efficiencies of different parts of the system, and of the system as a whole, that the installation when completed should be capable of hauling a 1,000-ton train through the tunnel, from terminal to terminal, in 15 minutes, and that in so doing, the maximum speed should not exceed 25 miles per hour, and the minimum speed, when ascending a 2% grade, should not be less than 10 miles per hour. Tenders were submitted by the companies that were prepared to undertake the work as specified, and after careful analysis the decision was made to adopt the alternating current system, using a 3-phase system for distribution of power required for pumping and for shop motors, with single-phase distribution for locomotives and lighting, using an overhead working conductor, this being the first decision providing for the application of the single-phase system to heavy steam road service. The contract was awarded to the Westinghouse Electric and Manufacturing Co., and provided that it be responsible for the installation and successful operation of the entire equipment. The equipment has been in continuous operation since May 17, 1908, handling the entire train service of the tunnel company, this service being the heaviest railway service handled by electricity in the world.

The tunnel is operated as an independent division of the railway, the trains being de-

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GUARANTEE COST per thousand miles for from one to five years, when conditions warrant it.

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STREET RAILWAY LUBRICATION A SPECIALTY.

GALENA RAILWAY SAFETY OIL

Made especially for use in Headlights, Cab, Classification and Tail-lights, and for Switch and Semaphore Lamps. Burns equally well with the long time as with the one day burner, with or without chimney, as the burner requires.

Is pure water white in color; high fire test; low cold test, and splendid gravity.

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CHARLES MILLER,

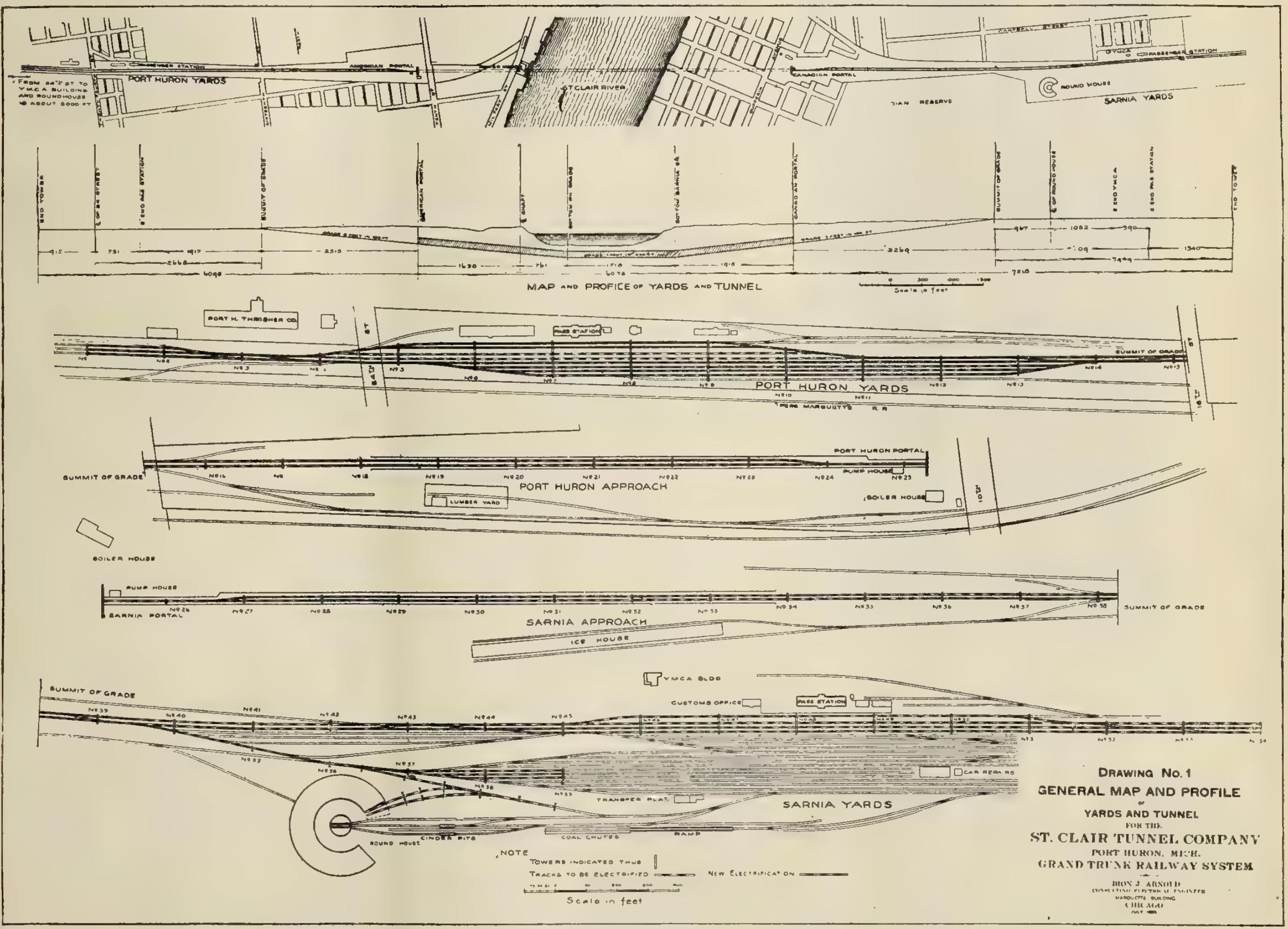
PRESIDENT.

livered by the Eastern Division in the yards at Sarnia, and taken by the tunnel locomotives through the tunnel, and delivered to the Western Division at the yards in Port Huron, the eastbound trains being handled in the reverse order. The steam locomotives operating on the divisions adjacent to the tunnel are never operated through the tunnel. In order to increase the capacity of the tunnel, it was desirable to provide for the maximum practicable tractive effort in the new locomotives. The capacity limit was determined by the maximum pull to which it was deemed wise to subject the drawbars on the mixed rolling stock that must be handled, without danger of breaking trains in two. For this reason the locomotives were specified of sufficient capacity to develop a drawbar pull of 50,000 lbs., when operating at a speed of 10 miles an hour. It was estimated that such a locomotive would be able to make the complete trip through the tunnel from terminal to terminal with a 1,000-ton train in 15 minutes, or four 1,000-ton trains per hour, which would provide a capacity for traffic about three times larger than the actual maximum demands up to the present time.

It was estimated that the pumping service, for which adequate provision must be made, would require the installation at the Sarnia portal of two pumps each of capacity of 5,500 gallons a minute, and at the Port Huron portal the installation of two pumps each with a capacity of 4,000 gallons a minute. To provide absolute continuity of service, duplicate pumping equipments were provided in each portal, as well as duplicate feeder lines leading from the power plant to the pump houses. As noted above, the pumps must always be in readiness for operation day and night throughout the entire year, which in case of electrical pumps, simply necessitates the presence in the pump house of a pump operator and the continuous operation of the power plant. The lighting service to be provided for is of minor importance in so far as the amount of power required at both Sarnia and Port Huron is concerned, this being somewhat less than 100 kw. The power requirement for motors in the roundhouses at Sarnia and Port Huron is about 100 kw. for both shops. To furnish electrical energy for the service outlined above, provision must be made in the power plant for supplying single-phase current for the electrical locomotives, 3-phase current for the pumping service, and 3-phase and single-phase current both for the power and lighting service at various points throughout Sarnia and Port Huron, as well as for a small amount of arc lighting.

Electrification Equipment.—Three locomotives have been provided for this service, each consisting of two half-units, each half-unit mounted on three pairs of axles driven through gears by three single-phase motors with a nominal rating of 250 h.p. each, the nominal horse power of the complete locomotive unit being 1,500. In so far as the electric motors have a very liberal overload rating, it is easily possible to develop 2,000 h.p., and on occasion in excess of this, in one locomotive. The half-units are duplicate in every respect, and as the multiple unit system of control is used, they can be operated when coupled together with the same facility that a single-phase half-unit can be operated. The locomotives are designed to develop a drawbar pull of 50,000 lbs. at the comparatively low speed of 10 miles an hour. The locomotives are powerful enough to start a 1,000-ton train on a 2% grade in case this should be necessary. At a test made on a half-unit, using a dynometer car, it was found that a single half-unit developed 43,000 lbs. drawbar pull before slipping the wheels. This was done on a comparatively dry rail, with a liberal use of sand. On this basis it would be possible to develop about 86,000 lbs. drawbar pull with a complete locomotive. The maximum speed of the locomotives is 35 miles an hour. However, it is not the intention of the tunnel company to operate the locomotives at a speed in excess of 30 miles an hour. Speed indicators are provided, which indicate on a large dial located in the locomotive cab near the engine driver's seat the speed at which the locomotive is running, and at the same time record the speed throughout the length of the run. This assists the driver in keeping the speed of trains within prescribed limits at all times, and furnishes records of the exact speed of the trains throughout all trips, for the inspection of the superintendent of the tunnel.

The locomotive cab is rectangular in section, constructed of sheet metal supported by structural steel shapes. Inside the cab are located practically all of the apparatus used in connection with the locomotive, with the exception of the motors and the brake rigging. Included in this apparatus is a single-phase transformer used for reducing the voltage from 3,300 to a voltage suitable for application to the motor. The transformer, as well as the motors, are air-cooled, the supply of air being furnished by an electrically driven blower, also located in the locomotive cab. The blower is driven by a single-phase motor, the current being supplied at 100 volts by a tap from the main transformer. With the moderate supply of cooling air furnished by the blower fan, both transformers and motors are able to operate at full capacity with com-

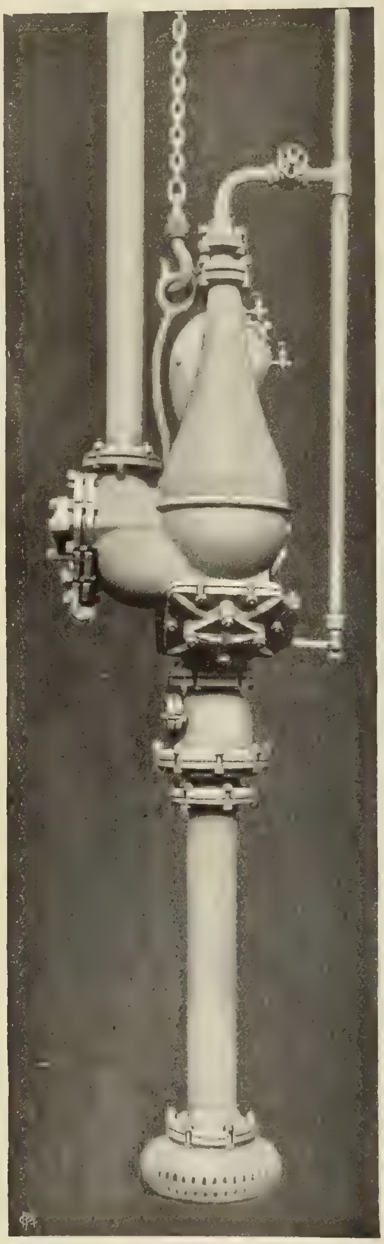


ST. CLAIR TUNNEL, MAPS OF YARDS AND PROFILE OF TUNNEL AND APPROACHES

THE

PULSOMETER

STEAM PUMP



NO RODS
PISTONS
GLANDS
LEATHERS
LEVERS

1. By its design it is not subject to wear like other pumps.
2. The only wearing parts can be readily and cheaply renewed.
3. Requires no skilled labor. It will work for weeks without anyone going near it.
4. No oil, tallow, packing or leathers required.
5. Will pump almost anything. There is nothing to stick up with dirty or gritty water.
6. Requires no foundation. Will work hanging on a chain.
7. Will go into a smaller space than any other steam pump of equal capacity.
8. Has no exhaust steam.
9. Is noiseless.
10. It is not affected by weather. All moving parts are internal.

Our Catalogue No. 16 fully describes the Pulsometer—Mailed on Request

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APPROACH TO ST. CLAIR TUNNEL FROM SARNIA.

paratively little increase in temperature above that of the surrounding air. The air for the cooling is taken through a suitably designed shutter located in the side of the locomotive cab, and is distributed through sheet metal ducts installed under the cab floor to the three motors under the cab, and to the transformer. From the latter the air passes either through an opening in the floor of the cab into the open air, or, if desired, into the interior of the cab. In the latter case an appreciable amount of heat can be secured from the main transformer for utilization in heating the cab during cold weather. Motor driven air compressors are also located in the cab. The air brake equipment is of the standard type used for electric cars and locomotives, with the exception of the motors, which are single phase. They are operated by means of an electric controller, which serves to keep the normal air pressure at about 100 lbs. The compressed air is used for the purpose of operating both the automatic and straight air equipment on locomotive and train, and in addition for a variety of minor purposes in and about the locomotive. All of the contactor switches used in controlling the operation of the locomotives are air operated, the air valves being operated by direct current electrical control. This is also true of ringing the bell, blowing the whistle, raising and lowering the trolley, and the application of sand to the tracks.

Speed control of the locomotive is effected by varying the voltage at the terminals of the motors. This is obtained by making connection with various transformer taps by means of the air operated, electrically controlled contactor switches. Electric control of the contactors is effected through the master controller, which in the electric locomotive replaces the throttle valve in the steam locomotive. The current for the master controller is furnished by a small storage battery operating at about 20 volts, the battery in turn being charged by means of a small motor-generator set provided for the purpose. The electric controller has 21 points in all, 17 of which are running points. This provides for an increase in the speed of the locomotive from the lowest running speed to the maximum speed by very slight gradations, thus making it possible to maintain a practically constant drawbar pull, while the locomotive is accelerating the train. This is very desirable, in so far as the minimum variation in the drawbar pull while handling the train through the tunnel decreases the liability of breaking the train in two. Particular attention was given this phase of the train operation in designing the locomotive, and the resulting remarkable decrease in the number of breaks-in-two since the operation with electric locomotives has been inaugurated is a source of great satisfaction. On the master controller is also located the reverse lever, which controls through the electrically operated solenoids the air operated contactors used in reversing the motor connections. Here also are located the push buttons, which serve to raise and lower the trolley, operate the front and rear sanders, reset the circuit breaker, and ring the bell. The ringing of the bell and the application of sand by means of the front and rear sanders are also controlled by foot pedals, thus making it possible for the operator to perform these functions while his two hands are employed in operating the master controller and the air. The balance of the equipment of each locomotive, consisting of the sand boxes, the seats for the drivers, ammeters, voltmeters, wattmeters, the banks of contactors, the preventive resistance coils, circuit breakers, auxiliary storage battery and motor generator set for charging it, are all installed in a compact manner inside of the cab, and are supported on structural steel work.

Each half-unit is arranged for operation in either direction; air valves, a master controller and ammeter being located at each end of the cab. By means of cable couplings, the control system of two or more half-units can be thrown in parallel, thus providing for the operation of any number of half-units from any master controller. In this way the two half-units are generally operated in the handling of freight trains through the tunnel. The passenger traffic can ordinarily be taken care of by a single half-unit.

The current is collected from the trolley wires suspended at a distance of 22 ft. from the track by means of a sliding bow pantograph trolley. In so far as the trolley wire extends throughout the length of the tunnel, no additional provision has to be made for the collection of current while the locomotive is passing through the tunnel. Electric headlights are provided, as well as lights for the illumination of the interior of the cab and the dials of the indicating instruments. The heating of the cabs is provided for by means of standard electric heaters. Heat is also available for drying the sand stored in sand boxes. In general, the M. C. B. standards have been conformed with in so far as couplers, wheel treads, etc., are concerned. The general dimensions of the half-units are as follows:

Length over all	23 ft. 6 in.
Height from top of rail to top of roof	13 ft.
Height from top of rail to top of pantograph bow when lowered	14 ft. 11 in.
Width of cab over all	9 ft. 8 in.
Total weight of locomotive half-unit, fully equipped	67½ tons
(This weight is practically evenly divided over three drivers.)	
Weight of complete locomotive unit	135 tons
Length of rigid wheel base	16 ft.
Diameter of driving wheels	62 in.
Normal speed of train, ascending 2 per cent. grade (miles per hour)	10
Normal speed on level tracks (miles per hour)	25 to 30

In service it has been found that the locomotives will very readily handle a 1,000-ton train at from 11 to 12, and possibly 13 to 14 miles an hour on a 2% grade, thus demonstrating their ability to more than fulfil the specified performance.

The second service to be provided for electrically, consists of the pumping necessary to free the tunnel approaches from water due to rain storms or melting snow, and the removal of a small amount of condensation and seepage water collecting in the tunnel. For this purpose pumping plants have been installed at both tunnel portals, that at the Port Huron entrance consisting of two centrifugal pumps, each capable of delivering 4,000 gallons a minute, driven by direct connected, 100 h.p., 3-phase, 25-cycle, 3,300-volt, induction motors, and that at the Sarnia entrance consisting of two 5,500 gallon pumps driven by two 200 h.p. motors of the same type. In addition a 150-gallon pump driven by small induction motor is located in each pump house, these pumps serving to take care of the small amount of water that is constantly finding its way into the drainage wells. The motors in the pump houses are controlled by oil switches located on suitable panels. Provision is made on the panels for connecting the motor bus bars with either of two feeders leading from the power plant. The centrifugal pumps used in this service can be primed by means of the water stored in the large discharge pipes. Valves controlling the

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RAILWAY SUPPLIES

LOCOMOTIVES - MOTOR CARS - HAND CARS - BARROWS - TRUCKS
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flow of the water are all located so as to be conveniently accessible for the pump house operator. The equipment has been found to operate in an entirely satisfactory manner, and provides for the handling of water with a minimum amount of attendance and expense. Two 150-gallon, motor-operated, centrifugal pumps are located at the foot of the Sarnia grade, and serve to remove from the tunnel the condensation and seepage water, delivering it to the well at the Sarnia portal. The seepage pumps are similar to the small pumps installed at the portal pump houses, with the exception of motors, which for this service are entirely enclosed, suitable for continuous operation in the tunnel, where they are liable to be subjected to more moisture than are the motors located in the pump houses.

Incandescent lamps in the roundhouses, the passenger stations, the Y.M.C.A. buildings in both Sarnia and Port Huron, installed previous to the electrification of the tunnel, are being furnished with current from the electric power plant by means of step-down transformers, reducing the voltage from 3,300 to 110 volts. Motors operating at 3,300 volts have been installed in the roundhouses at Sarnia and Port Huron, the current supply being taken from the power plant. In all, 480 lights have been installed throughout the tunnel on either side at a height of 10 ft. above the rail. The tunnel lamps are operated four in series from the 440-volt secondaries of the lighting transformers installed in the tunnel. Similar transformers furnish the current supply for the tunnel drainage pump motors. In addition about 30 arc lights have been provided and installed in the yards at either terminal. These arcs are used for general illumination around passenger stations, roundhouses, and coal chutes. The current for the arc lights is furnished at the power plant by means of a mercury arc rectifier. The total amount of lighting is somewhat under 100 kw., which, together with the motor requirements of 100 kw., makes a total of slightly over 200 kw. for small power and lighting outside of the plant.

For distribution of the single-phase current to the locomotive, substantial steel towers have been erected throughout the tunnel yards. The steel work used for supporting the working conductor consists of strong lattice columns supporting bridges of trussed construction. The average spacing of the overhead bridges is 250 ft. They are designed to extend over all tracks that are to be electrified, and in case of those located at passenger station extend, in addition, over the platforms, thus in no way interfering with the access of passengers to and from the trains. This necessitates a length of about 141 ft. in case of some of the bridges located on the Port Huron side, in which case the bridge spans seven electrified tracks, in addition to the station platform. Single catenary construction is used throughout, a messenger cable of 5/8-inch extra heavy galvanized steel being suspended on the insulators located on the overhead bridges immediately over the centre lines of the track to be equipped. The working conductor is attached to the messenger cable by means of fittings of varying lengths so arranged as to support it at a uniform height of 22 ft. above the top of the rail. Number 4/0 hard-drawn grooved copper is used throughout the yards, and at all places, excepting on the tunnel approaches and throughout the tunnel, on which sections two 300,000 cm. conductors have been installed. The messenger cables forming the catenary construction terminate at the tunnel portals, where they are securely anchored to eye bolts imbedded in the heavy masonry portal. At this point the messenger wires supporting the working conductor throughout the tunnel are anchored to special brackets located on the tunnel face. The working conductors in the tunnel are continuous with those on the tunnel approaches.

The method of supporting the trolley inside of the tunnel shell was conditioned by the requirement that complete overhead equipment should not encroach on the tunnel opening more than 9 inches. This has been accomplished by bolting to the tunnel shell special iron brackets, each of which supports two spool-shaped insulators. These insulators in turn support steel messenger cables, which are drawn taut throughout the length of the tunnel, and attached at the tunnel portal to special brackets. Special clamps are attached to these messenger cables at points between the insulator supports, and these in turn serve to support the two trolley wires. The insulating supports are attached to the tunnel shell at intervals of 12 ft., as also are the clamps connecting the messenger cable with the trolley. This method provides an attachment at once sufficiently rigid to maintain the proper clearance between the trolley and the tunnel shell, and at the same time sufficiently flexible to provide for the proper operation of the trolley bow on the overhead conductor. Section switches have been provided where necessary to permit of disconnecting the working conductor over any switch track from the main line extending throughout the tunnel.

The columns at one end of the transmission bridges have been lengthened, for the purpose of supporting the transmission wires which supply current for the power and lighting service at the roundhouses and stations, as well as for the arc light circuits. Overhead lines terminate in the pump houses at either tunnel portal, where they are connected with the underground feeder system at the panel boards.

All feeder lines connecting the various parts of the equipment to be supplied from the power plant are carried in the tunnel conduits. For this purpose four conduit lines have been laid on either side of the tunnel throughout its length. Connection has been made with these conduit lines about 1,700 ft. from the Port Huron portal, with a vertical shaft extending from the top of the tunnel to the surface of the ground, terminating about 75 ft. from the power plant. The overhead feeders, terminating as above noted in the portal pump houses, are continued as underground feeders down through the tunnel and up the shaft, finally terminating in the switchboard at the power plant. For the pumping service, two independent feeders are laid from each portal pump house, one being installed on either side of the tunnel and both terminating at the power plant switchboard. The heavy feeders for supplying the locomotive current to the trolley extend from the tunnel through the vertical shaft to the power house. This arrangement provides for all feeders leaving the power plant underground. The cables are paper insulated, lead encased and are installed in tile ducts.

The Power Plant is located on the Port Huron bank of the St. Clair River, about 100 ft. from the centre line of the tunnel. The building is 50 ft. from the street property line, which provides ample space for a lawn in front, while the back building line is about 50 ft. from the retaining wall, which serves as a dock line along the river. Sufficient space is afforded between the building and the river front for a G.T.R. spur, which is used for bringing in coal and various supplies needed for the operation of the power plant, as well as the removal of ashes. The proximity of the river makes it possible for coal to be received and handled by boat in case this should be found desirable. The power plant building covers a ground area approximately 100 ft. square. The building is divided longitudinally by a fire wall separating the boiler from the turbine rooms. In the front elevation, the height of the brick work above the water table is about 36 ft., the water table being about 2½ ft. above the grade on the front side of the building. As the building is located on the side of a hill flanking the river, the ground line falls away rapidly alongside of the building until the grade line of the dock is reached, which is maintained for all entrances at the rear, this being 24 ft. below the street

INTERIOR OF ST. CLAIR TUNNEL.

Extraordinary Work Accomplished by "MARION" Steam Shovels ON PANAMA CANAL

The Following is Taken from the Canal Record, August 26, 1908:

Steam Shovel Records in July.

Steam Shovels Nos. 256 and 262 at work in Culebra cut surpassed all excavation records made since beginning of American control, by taking out respectively 54,927 cubic yards and 53,440 cubic yards of material during 26 days in July. Other high records made in July follow:

Tabernilla	District,	No.	254—37,974 yds.
Gorgona	"	"	256—54,927 "
Empire	"	"	262—53,440 "
Culebra	"	"	263—42,690 "
Pedro Migul	"	"	257—33,035 "
Pacific	"	"	258—32,480 "

The above six highest records, made in six separate divisions, were all made with MARION MODEL 91 Shovels.

Canal Record of Sept. 9, 1908.

Steam Shovel No. 256, at work at Matachin, surpassed all excavation records made since the beginning of American control, by taking out 55,419 cubic yards of material in 25 days in August.

Shovel No. 263, working in Culebra cut, has the second high record for the month, having excavated 32,979 cubic yards in Culebra district in 16 days, and 12,786 cubic yards in Empire district in 10 days, a total of 45,765 cubic yds. of material in 26 days.

The above facts prove that the MARION Shovels are the best on the market for all classes of work.

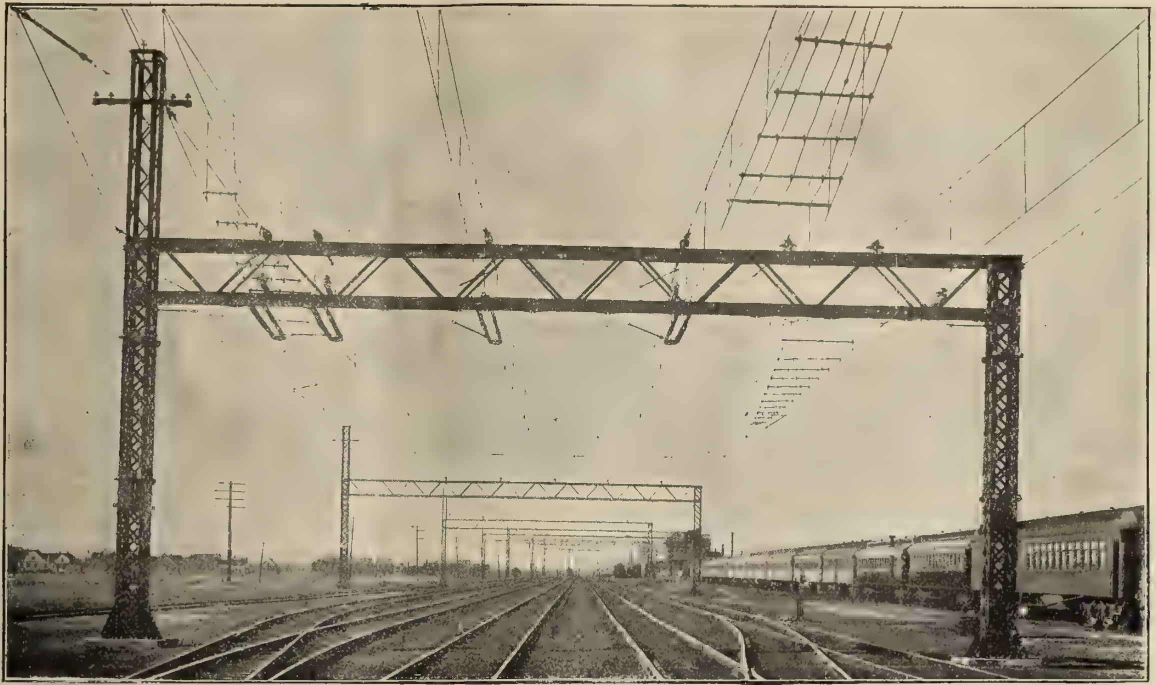
The New York Sun of Sept. 21, Contains the Following which Refers to Three of the Marion Shovels, Model 91, at Work on the Isthmus:

WASHINGTON, Sept. 20.—Steam Shovel No. 256, working on the Panama Canal at Matachin, according to advices received at the Washington offices of the Canal Commission, is the champion of the Isthmus. In making the dirt fly it recently surpassed all previous records since the American Government took charge of the canal work by excavating 55,419 cubic yards of earth and rock during the 25 working days in last month.

Shovel No. 263 in Culebra cut has the second high record for the month, having excavated 32,979 cubic yards in Culebra district in 16 days, and 12,786 cubic yards in the Empire district in 10 days, a total of 45,765 cubic yards of material in 26 days.

Shovel No. 255, at work at San Pablo, broke all records in that division, by excavating 22,028 cubic yards of earth, and 20,333 cubic yards of rock, a total of 42,361 cubic yards for the 26 days.

F·H·Hopkins & Co SUCCESSORS LATE JAMES COOPER **Montreal**



OVERHEAD WORK, ST. CLAIR TUNNEL TERMINALS.

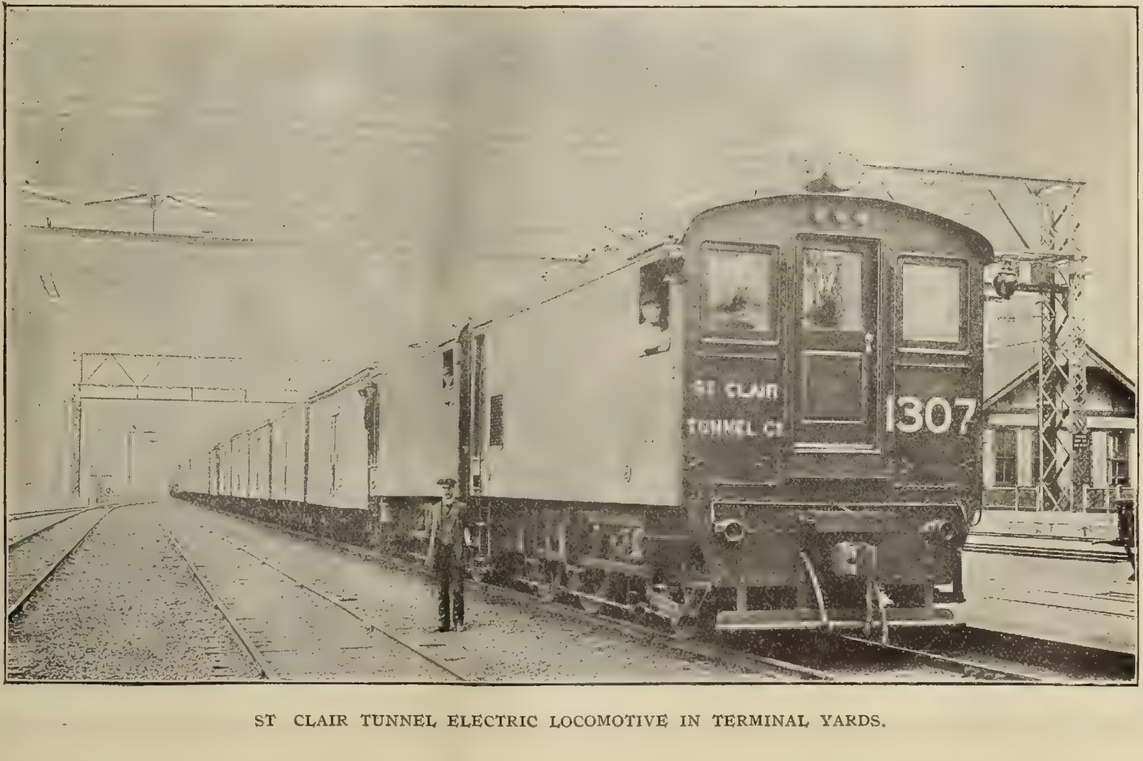
level. The foundation up to the water table is constructed of mass concrete; the building superstructure is of steel and massive paving brick of dark brown color. The building trimmings are of cut stone and concrete. The general design of the building is along simple massive lines and presents, upon completion, a very attractive appearance.

The foundation footings for the building were carried down at all points into the clay, which is found underlying all of the surface soil in the vicinity. They were designed for bearing pressure of two tons per sq. ft All of the column footings supporting the coal bunkers, as well as the footing underneath the stack, receive additional support in the way of piling, the location on the river bank making it advisable to take this additional precaution. The self-supporting steel structure is carried on concrete foundation walls and footings. The steel work carries not only the reinforced cinder concrete roof, but in the turbine room the runway for the travelling crane, and in the boiler room the reinforced concrete coal bunkers. The brick building walls are also carried on the concrete foundations, and are built about the steel columns. The walls are finished at the top with a parapet capped with concrete coping. The wood work used in finishing the interior of the offices and turbine room is of mission oak.

The roof is constructed of cinder concrete overlaid with composition roofing. Drainage downspouts are taken down through the interior of the building and discharge into the sewer system.

The interior of the engine and boiler rooms are lined with pressed brick of a light grey color. In the turbine room a wainscoting 8 ft. in height of white enamelled brick is carried around the three sides of the room, in which the brick wall surface is exposed, the front side of the turbine room being given up entirely to the switchboard, the glazed partitions separating the officers' and employes' room, the turbine room and the entrance hallways. All floors are concrete, the building being practically fireproof throughout. The light color of the brick, together with the light grey paint applied to the roof trusses and ceilings, tends to materially enhance the ample natural lighting which is provided for the building by means of a large window area

The general artificial illumination in the building is taken care of by means of Nernst lamps, eight of which are provided for the illumination of the turbine room, these being suspended from the lower chords of the roof trusses, and two for the boiler room. In addition, nearly 200 incandescent lamps are used for illumination in various parts of the plant. Wall brackets of design to harmonize with the interior finish are used in the turbine room. Chandeliers, wall brackets, and ceiling globes are provided for the lighting in the offices and hallways. Four incandescent lamp clusters are mounted on cast iron pedestals on either side of the two front entrances of the building. Hooded lamps are installed over all side entrances, as well as over the coal-receiving hopper at the rear of the building. All passageways behind and above the boilers, along the pipe lines, as well as those leading to and over the coal bunkers, are well lighted, the lights being controlled by switches located at convenient points.



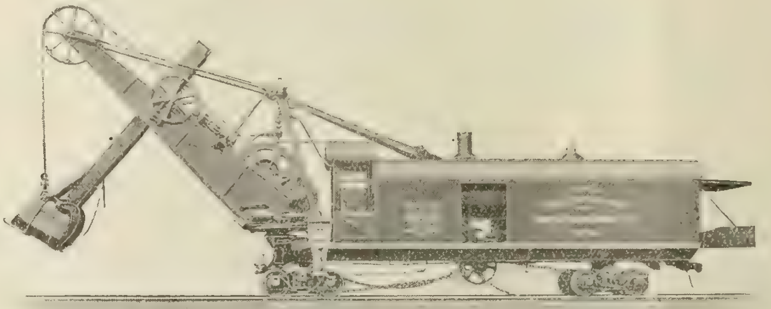
ST CLAIR TUNNEL ELECTRIC LOCOMOTIVE IN TERMINAL YARDS.

The water supply for house use in the power plant is furnished by a service pump and drawn either from the city water mains or from the St. Clair River as desired. Toilets and lavatories have been installed in connection with the engineer's office and in the turbine room on the basement floor, in the latter of which a shower bath with hot and cold water has been provided for the use of the employes. The necessary heating in the offices has been taken care of by radiators receiving their steam supply from auxiliary header of the power plant. A sewer system has been installed in connection with the building, and connections have been made to fittings in the toilet rooms and to traps installed at various points in the basement floors, as well as to the downspouts, this latter to take the run-off from the roof.

LOCOMOTIVES

Pacific Type Passenger Locomotive built for the Intercolonial Railway. Total weight of engine, 194,500 pounds. Weight on driving wheels, 132,000 pounds; diameter of driving wheels, 72 inches. Boiler pressure, 200 pounds. Maximum tractive power, 29,200 pounds.

STEAM SHOVELS



A high-class and powerful machine, absolutely reliable under all conditions of service.

MONTREAL LOCOMOTIVE WORKS, LTD.

BANK OF OTTAWA BUILDING, MONTREAL, CANADA.

Coal is delivered to the plant in hopper cars, which are run over a wooden trestle leading above the receiving hopper, into which it is dumped by gravity. The coal-receiving hopper feeds directly into the crusher, which has a capacity of about 30 tons an hour, and which acts at the same time as a feeder, delivering the coal at a uniform rate to the vertical bucket elevator extending to the top of the building. From the vertical elevator the coal is fed by chutes on to a conveyor belt, from which it is discharged by an automatic tripper arranged to deliver the coal at any point above the bunkers. Slow speed induction motors of the squirrel cage type drive the coal handling apparatus, a 20 h.p. motor being used in the crusher and a 10 h.p. motor installed in the pent house at the top of the building for the operation of the elevator and conveyor. The coal bunkers are constructed of reinforced concrete resting on the steel building columns. The space occupied by them, located in front of and above the boilers, is separated entirely from the boiler room by metal lath partition, thus practically insuring the exclusion of coal dust from the boiler room. In a similar way the coal crusher pit and the coal elevating mechanism are enclosed as completely as possible. Coal for firing purposes is drawn directly from the bunkers, through sheet metal chutes, into the stoker hoppers, which are located in front of the boilers. The ashes are drawn from the grates of the boiler furnaces on to the boiler room floor, where clinkers are broken and delivered through a coarse grating into the ash hoppers which are suspended underneath the floor. From the hoppers they fall by gravity through ash grates into the push cars, and are dumped into an ash chute connecting with the coal elevator. The elevator, when handling ashes, discharges into a spout leading to a small ash bunker at the end of the building. From this bunker they can be delivered by gravity into cars alongside the power plant.

Underfeed stokers are installed in the plant, six being used for each battery of two boilers, making a total equipment of twelve stokers. Forced draft is supplied for each battery by a steel plate fan 11 ft. in diameter and 3 ft. 5 ins. wide, driven by 10 x 10 x 10 type B enclosed vertical engine directly connected to the fan shaft. These fans are located in the pit of the turbine room. By means of a special blast grate in the galvanized iron duct leading from the fans to the boilers, either battery of stokers may be supplied from either of the fans. Each battery of stokers is controlled by an automatic regulator, which is driven from the shaft belted to the fan engines. Friction clutches on this shaft supply cross connection for driving either of the regulators from either engine. This driving mechanism, together with the galvanized iron ducts and gates, is suspended from the ceiling of the boiler room basement. On account of the very great variation in the load on the power plant, special precautions were necessary for the control of the fires under the boilers, in order to keep the steam pressure fairly constant. This is accomplished by means of the stoker equipment, which controls the fire automatically, both by regulating the air forced through the stokers and the rate of feeding of coal into the boiler furnaces. This regulation is accomplished by means of a regulating valve, which acts as a throttling valve on the fan engines. The potential piping leading from the regulator is connected to the main steam header between the superheater and the turbine. In case the pressure in the steam lines tends to drop, the regulating valve increases the supply of steam to the fan engine, thus at the same time increasing the amount of air supplied to the boilers, and the frequency of operation of the stockers. In case the boiler pressure tends to rise, the valve decreases the supply of steam to the fan engine, thus decreasing the amount of air and coal supplied to the furnaces. This apparatus is entirely automatic, and has been found to control the steam pressure very closely.

The boiler equipment consists of four 400 h.p. Babcock & Wilcox sectional water tube boilers arranged in two batteries of two each, each boiler having three drums 42 ins. in diameter and 23 ft. 4 ins. in length. This results in an unusually wide boiler, the tubes being arranged nine high and 21 wide, in order to secure quick steaming. This requirement is a necessary complement to the automatic stoker control referred to above. In addition the three drums provide storage for a large quantity of heated water available for quick steaming on any decrease in pressure. The boilers are designed to carry 200 lbs. steam pressure, each unit being equipped with two tandem connected 2½-in. blow-off valves, the necessary pressure gauges, water columns, check valves, high and low water lines and other fittings.

The smoke flue, located in the boiler room basement floor, is built of reinforced concrete. The boiler flues open directly down into the smoke flue, which in turn leads in a straight line through the south building wall to the reinforced concrete stack. The height of stack from the top of the smoke flue is 150 ft., or 162 ft. above the basement floor. The inner shell is of standard construction, and the outer shell, which is the same height as the building, has a square exterior, being faced with brick above the grade line to conform with the building construction. Lightning protection has been applied to the stack in the form of standard equipment.

The separately fired superheater is located between two batteries of boilers. The superheater has a capacity to add 200 degrees of superheat to 36,000 lbs. of steam per hour. The superheater is hand-fired, but requires very little additional attention, as it is provided with automatic temperature regulator, which, by admitting air either above or below the fires, serves to control the superheat within narrow limits, approximately 30°. The regulator consists of a thermal coupling installed in the superheater steam outlet, which in turn operates through a relay and solenoid on the by-pass valve of the hydraulic cylinder, the piston of which directly controls the dampers in the air ducts. The regulating device is so adjusted as to provide a superheat of about 100° under actual working conditions, and has been found in operation to very closely control the temperature of the steam, notwithstanding the great variation of load to which the power plant is subjected.

The steam is supplied by the boilers at 200 lbs. pressure, and is delivered through the system of high pressure piping either to the superheaters and thence to the turbines, or through by-pass connections directly to the turbines, steam separators being installed in the piping system adjacent to the latter. The long sweep bends connecting the boiler nozzles with the main header are of 6-in. extra heavy pipe. The short header connecting the two batteries of boilers, in which are located the valves leading to the superheater and turbines, is 8 ins. in diameter, while the lines from the header to the turbines are 7 ins. The fittings throughout are of mild steel, and designed for heavy pressure with superheated steam. All high pressure piping is provided with welded flanges. The necessary drips have been supplied for the proper draining of the high pressure system. An auxiliary header 6 ins. in diameter, operated at 125 lbs., is installed along the boiler room wall at the rear of the boilers. From this header the steam supply is taken to all of the steam auxiliaries in the plant. The free exhaust piping from the back pressure relief valve is of 14-in. spiral riveted steel pipe, extending through the boiler room basement and thence up through the roof. The auxiliary exhaust is made of 8-in. pipe, supported in the boiler room along the fire wall, and receives the exhaust steam from the various auxiliaries in the plant. Steam is delivered by the header to either of the enclosed heaters installed in the boiler room just back of the superheater. A 12-in. oil separator is installed in the exhaust steam line just before it enters the feed water heater. Vertical water tube heaters, each of 700 h.p. capacity, are used. A 4-in. spiral riveted pipe for free exhaust leads from each heater up through the roof.

The condensing water is obtained from the St. Clair River, a concrete intake provided with structural steel grid and woven wire screen being installed along the dock line.

ELECTRIC LOCOMOTIVE AND PASSENGER TRAIN EMERGING FROM ST. CLAIR TUNNEL.

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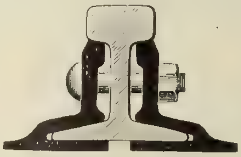
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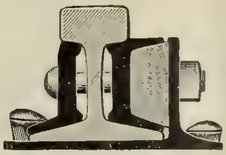
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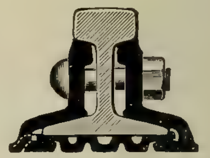
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From the intake the water flows through an 18-in. tile to the cold wells located below the centrifugal circulating pumps in the pit of the turbine room basement. Water is delivered from each of these by the circulating pump through the condenser, and is discharged into the hot well below the condensers. From the hot wells the water flows through an 18-in. pipe into a sump under the boiler feed pumps. These pumps deliver the water through the feed water heater to the boilers. Excess water in the pumps is discharged through an 18-in. tile pipe emptying into the river. A 3-in. Worthington water meter is connected between each of the feed pumps and the heater. The city water supply is connected to each feed pump by a 3-in. tap. In addition, the suction of the feed pumps may be connected to the cold water intake, thus making three sources of supply for the boiler feed water.

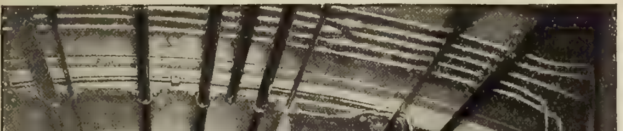
Each battery of boilers is fed by a 12 x 6 x 10 duplex outside, end-packed Worthington boiler feed pump. In addition water is provided for various other purposes, such as cooling the lubricating oils in the turbines, supplying the glands of the turbines, for hose connections in and about the power plant, all of this being supplied by a small service pump, drawing supply from one of the cold wells. The discharge pressure on the water system supplied by this pump is maintained by a pressure-regulating valve at about 75 lbs. A connection containing a check valve is made from the city mains to this piping. In so far as the city pressure is carried at about 45 lbs., the entire water supply will be furnished normally by the service pump. In case, however, the service pump should fail to operate, the necessary water supply will be forced in from the city mains through the check valve.

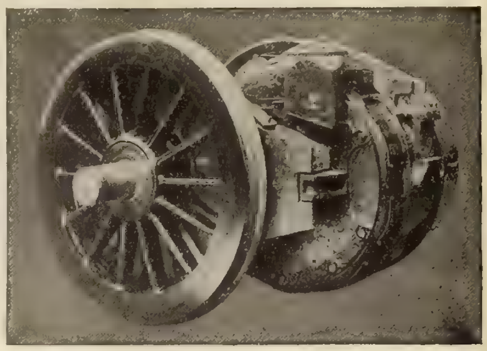
Two Westinghouse Parsons turbo-generators have been installed in the plant. The machines are designed to operate at a normal voltage of 3,300 volts, with a frequency of 25 cycles per second. They are 3-phase machines, but are further required by the specifications to furnish their full rated load of 1,250 kw. single-phase current. The turbines are approximately 37 ft. over all, 6 ft. wide, and 8 ft. high, and designed to operate at 1,500 r. p. m. The generators are cooled by means of air drawn through the coils by vanes installed on the rotor. A speed limit device is arranged to cut off the supply of steam in case the speed of the turbine exceeds a predetermined value.

Barometric jet condensers with 30-in. inlet have been installed in connection with each of the steam turbines. A 36-in. exhaust pipe connects the exhaust outlet of the turbine with reducing fitting attached to the condenser head. A 14-in. automatic relief valve is installed in connection with the exhaust fitting, and connected to the free exhaust piping. The cooling water for each condenser is furnished by a 10-in. volute pump driven by 7 x 9 vertical engine. The rotative straight line vacuum pumps, 8 x 6 x 12 in dimension, are supplied in connection with each condensing equipment. The dry vacuum pumps are located on the turbine room floor alongside the condensers, while the circulating pumps are located in the open pit in the turbine room basement, where they are in plain view from the turbine room floor.

Two steam-driven exciters have been installed in the plant, each of 25 kw. capacity, this being sufficient to provide excitation for a single turbine. In addition a motor-driven exciter of 40 kw. capacity is installed, and is ordinarily used in the operation of the plant, the two steam-driven exciters being for additional security so far as continuity of service is concerned. The generators of the steam-driven exciters are of the Westinghouse make, and are driven by Westinghouse vertical type engines. Both generator and motor of the motor-driven exciter are of Westinghouse manufacture, the motor being 3-phase, 3,300-volt, of the squirrel cage induction type.

The switchboard, also of Westinghouse make, contains 10 panels, and is made up as follows: One panel on which is mounted the regulator, the voltmeters, frequency meter, and synchroscope; two panels, one of which controls the two steam-driven exciters, the second of which controls the motor-driven exciter; one panel for the control of the current supply for power and light in the plant; two panels for the control of the two turbo-generators; one panel for the locomotive feeder; one for the pumping feeders; one for the power and light feeders; and one for the control of the arc light circuits. All of the high-voltage oil switches are located on structural steel frame work in the switch room directly behind the switchboard, no high-tension current being brought to the switchboard itself. Direct current at 125 volts is supplied for excitation, this being controlled from the main switchboard. The power plant lighting current is supplied as alternating current, through step-down transformers installed in a high tension compartment underneath the switchboard room, by means of which the 3,300-volt current is transformed to 110-volt for lighting distribution in the plant. By means of a special switch the lighting system can be transferred from the secondary of the transformer to the exciter bus bars. The switchboard panels are provided with standard apparatus, such as ammeters, voltmeters, and indicating wattmeters. Recording wattmeters have been installed as well, and so located as to measure the output of the plant required for the various kinds of service, namely, the locomotive service, pumping service, and lighting service. The voltage control of the generators is provided for by the installation of a Tirrill regulator, which controls the voltage of the locomotive phase. The lighting load is carried on this phase as well, and is thus free from the large voltage variations that are liable to occur on the other phases. The station for the operating engineer is directly in front of the switchboard, from which point all the electrical indicating instruments, as well as the switches used in the operation of the plant are accessible. On the opposite side of the turbine room, facing the switchboard, is a gauge board, on which are installed the various gauges, both indicating and recording, giving full information with regard to the operation of the boiler plant. This arrangement brings to the immediate view of the operating engineer all information necessary in actual running of the plant.





MOTOR AND DRIVING WHEELS, ELECTRIC LOCOMOTIVE, ST. CLAIR TUNNEL.

A hand-power travelling crane of 15 tons capacity is installed on runways in the turbine room, by means of which all parts of the equipment in the room can be conveniently handled.

CONSTRUCTION AND OPERATION OF ELECTRIFIED SYSTEM.—The entire electrical equipment has been in preliminary operation during the larger part of the year 1908. The work of construction was done without any material interference with the traffic through the tunnel. The greatest difficulty was experienced in carrying out that part of the installation located in the tunnel proper. For this purpose the tunnel was given over to the contractor for construction purposes for two 2-hour periods each day during the time that actual construction was in progress in the tunnel. The construction of the overhead work in the yards was carried out without any serious interference with the ordinary traffic of the road, and the power plant construction, being entirely removed from any of the properties operated by the tunnel company, was not subject to any interference on account of railway operation.

The problem of transferring the operation of the tunnel from steam to electricity gave rise to another problem which was successfully solved by the mutual co-operation of the representatives of the tunnel company and the contractor. No attempt was made to make a sudden transfer, but every precaution was taken, not only to thoroughly test out all electrical equipment before attempting to use it in regular service, but also to allow ample time in which to thoroughly familiarize all those connected with the operation of the equipment with their work. Steam locomotive engineers were trained in the use of the electric locomotives. The force required for maintenance of the locomotives and for maintenance and operation of the power plant were secured and assigned their

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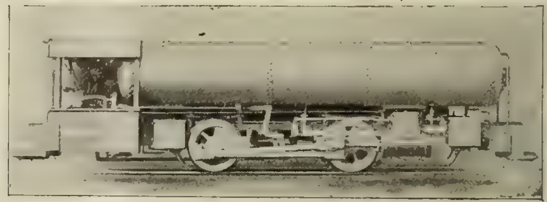

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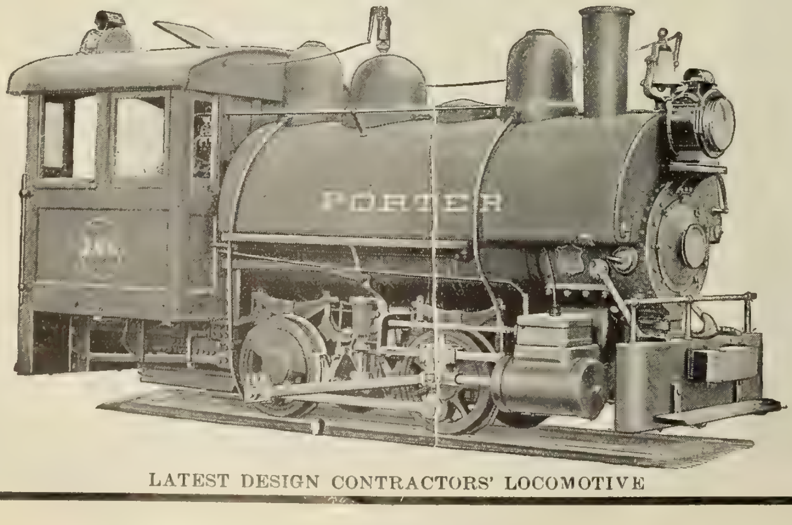

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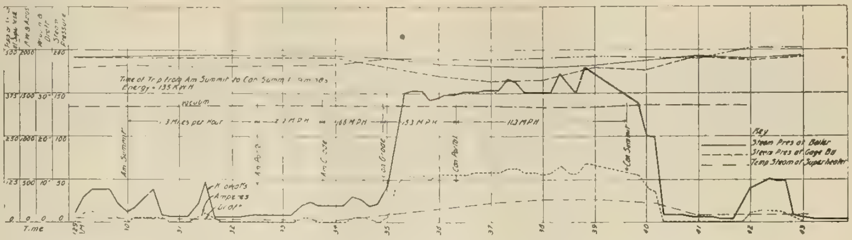


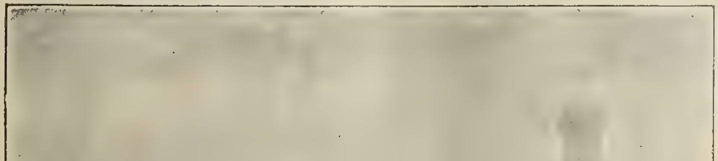
GRAPHICAL LOG OF ST. CLAIR TUNNEL POWER PLANT OPERATION; CONDENSING. RUN NO. 3, MAY 28, 1908. WEIGHT OF TRAIN WITH LOCOMOTIVE, 1,025.5 TONS.

duties during the time that the first experimental and test runs were made with the equipment. When everything was in readiness, test runs were made with light locomotives through the tunnel, and later, moderate-size trains were taken through the tunnel as test loads, and finally a limited number of regular trains were handled by the electric locomotives. In this way, by gradually increasing the amount of work done by the electrical equipment, the entire operation was transferred from steam to electricity. The fact that no delays worthy of notice have occurred, either during the time of partial operation, or later, during the time of preliminary electric operation, is worthy of special note, indicating as it does not only the high character of the system so far as design and construction is concerned, but as well the conformity to the operating conditions that must necessarily be made in changing the operation of a division of a railway system from steam to electricity.

Some of the salient features in the operation of the plant may be seen by reference to a typical load curve. This curve is a graphical log of the operation of the plant during the time required for the passage of trains from one terminal to the other. It shows at a glance the power required by the locomotive, and the variation of boiler pressure, forced draft pressure, superheat, etc., during the cycle represented by train movements in the tunnel. The efficiency of all parts of the equipment is fully up to the contract requirements, and in fact in many cases the performance is found to exceed that guaranteed. From the results of preliminary operation it appears that the economies which will be effected by the electrification will be slightly in excess of the attainment estimated at the time the preliminary report on the proposition was submitted. This satisfactory showing, together with the entire elimination of obnoxious gases from the tunnel, is a source of congratulation to the railway company, together with those connected with the enterprise in an engineering or contracting capacity.

TECHNICAL DATA.

GENERAL —		
Length of zone electrified, approximately (miles)		4
Length of single track, approximately (miles)		12
Length of tunnel (feet)		6,032
Maximum grade (per cent)		2
Normal weight of train (tons)		1,000
LOCOMOTIVES—		
Number of units per locomotive		2
Number of complete locomotives		3
Weight of complete locomotives (tons)		135
Normal motor capacity (h.p.)		1,500
Normal drawbar pull (pounds)		50,000
Maximum speed (miles per hour)		35
Minimum speed, up 2% grade with 1,000-ton train (miles per hour)		10
PUMPING STATIONS—		
Location—	Sarnia.	Port Huron.
Number of pumping units	2	2
Capacity of units (gal. per min.)	5,500	4,000
Capacity of driving motors (h.p.)	200	100
Voltage of motors (volts)	3,300	3,300
ELECTRICAL DISTRIBUTION SYSTEM—		
System adopted		Single phase.
Type of construction		Single catenary, supported by structural steel bridges.
Normal voltage (volts)		3,300
POWER PLANT—		
Number of turbo-generators		2
Normal capacity of each generator (kw.)		1,250
Generator voltage (volts)		3,300
Generator frequency (cycles per sec.)		25
Generator speed (r. p. m.)		1,500
Number of boilers		4
Nominal capacity of each boiler (h.p.)		400
Capacity of coal bunkers (tons)		750
Capacity of hand power crane (tons)		15



ELECTRIC POWER HOUSE, ST. CLAIR TUNNEL.

The foregoing is reproduced, with very slight alterations, from a description prepared by F. A. Sager, Assistant Engineer with Bion J. Arnold, consulting engineer for the tunnel company.

The formal inspection of the electrified tunnel and yards and the power plant took place on Nov. 12, when a party of nearly 200, consisting of G.T.R. officials and a large number of guests, including officials of other railways, many engineers, representatives of the Westinghouse companies and of the press assembled at Port Huron, Mich., as guests of the G.T.R. At 1 p.m. they boarded a special train consisting of two electric locomotives and a number of flat cars, which were provided with railings and passenger car seats, and decorated with bunting. The train proceeded through the tunnel to Sarnia Tunnel station, the trip being most instructive and enjoyable. The air of the tunnel was beautifully clear, the interior of the tube perfectly clean and dry, and the lighting excellent, it being as well lit as any city street at night, which led the Managing Director of THE RAILWAY AND MARINE WORLD, in speaking at the subsequent luncheon, to suggest to Passenger Traffic Manager Davis that moonlight tunnel excursions might be made a popular feature.

The party disembarked at Sarnia Tunnel station, and were conveyed by special train to the town of Sarnia, where they were entertained at luncheon at the Hotel Vendome, E. H. Fitzhugh, Third Vice-President G.T.R., occupying the chair. After the toasts of the King and the President of the United States had been drunk, H. G. Kelley, Chief Engineer G.T.R., proposed the health of Jos. Hobson, Consulting Engineer G.T.R., who received a tremendous ovation on rising to reply. The outstanding feature of the day was the hearty welcome accorded to Mr. Hobson by everyone present, and the recognition of the great work he performed in the original designing and construction of the tunnel, a work of much greater difficulty than its recent electrification. We have reason to know that when the tunnel was projected Mr. Hobson recommended electricity as the motive power, but the management decided in favor of steam locomotives. W. McNab, Principal Assistant Engineer G.T.R., proposed the health of B. J. Arnold, consulting engineer for the tunnel electrification, Mr. Arnold responding and paying a warm tribute to Mr. Hobson. F. A. Sager, assistant engineer with B. J. Arnold, proposed the Westinghouse Co., R. L. Wilson, Superintendent of Construction for the company, responding. Cy Warman proposed the Mayors of Sarnia and Port Huron, to which they replied. The Press, proposed by W. E. Davis, Passenger Traffic Manager G.T.R., was responded to by J. M. Eastwood, President of the Hamilton Times, and Acton Burrows, Managing Director of THE RAILWAY AND MARINE WORLD.

After luncheon the party returned through the tunnel by special train, and inspected the power house at Port Huron. In the evening a number of them were entertained at dinner at the Harrington Hotel, Port Huron. Only one toast was proposed, that of the G.T.R. Co., by Acton Burrows, H. Charlton, G.T.R. Advertising Agent, responding.

The whole arrangements for the day's functions were carried through without a hitch, and a most enjoyable time was spent by those who had the privilege of being present.

◆

At the recent meetings of the Brotherhood of Railway Engineers at Montreal, C. Pope, Kenora, Ont., and J. D. McAdam, Chapleau, Ont., were appointed General Chairman and Secretary-Treasurer, respectively, for the current year.

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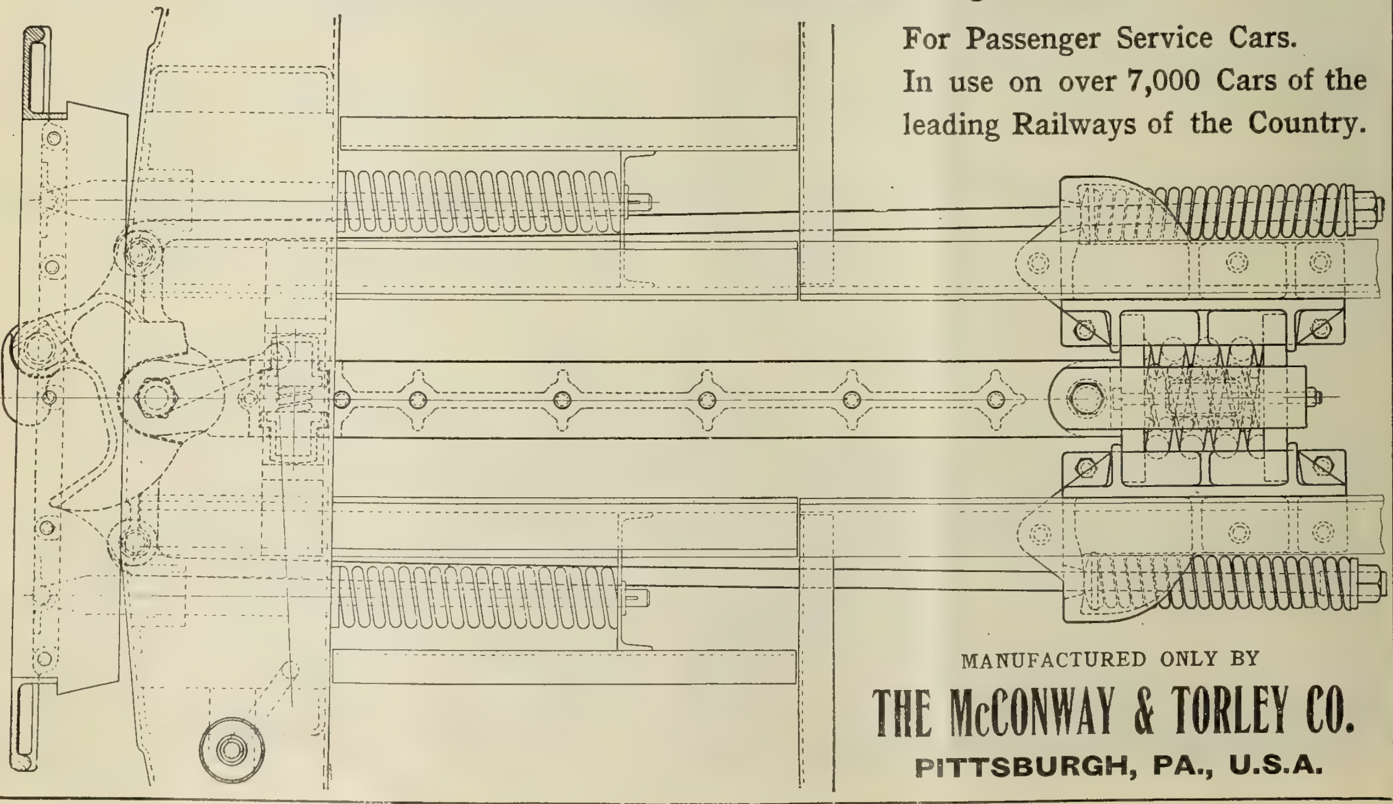

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The Lord's Day Act in Ontario.

The Board of Railway Commissioners passed the following order 5492, Oct. 28:

"Upon the hearing of counsel for the G.T.R. Co., the Lord's Day Alliance, and the Rational Sunday League, the evidence adduced, and what was alleged; counsel for the C.P.R., the Canadian Northern, and the Pere Marquette Railway Companies, the Department of Railways and Canals, and the Attorney-General of Ontario being represented at the hearings—It is ordered that permission be, and it is hereby granted the Applicant Company, its servants, workmen, agents, or officers, in order to prevent undue delay, to unload grain from vessels at lake ports in Ontario and load grain into cars at such ports between Sept. 15 in any year and June 1 in the year following, upon the Lord's Day. Between the said dates do such work as may be necessary for the purpose of furnishing to and from such lake ports in Ontario a continuous railway service for carrying grain from elevators and vessels upon the Lord's Day. Perform all work necessary upon the Lord's Day for the delivery to their several destinations of freight cars that were in transit when the Lord's Day began. And it is further ordered that other railway companies subject to the jurisdiction of the Board, carrying grain from Ontario lake ports as aforesaid, be entitled to the same privileges as those granted herein to the G.T.R. Co."

Following is Chief Commissioner Mabee's judgment on which the order was based: This application is made by the Grand Trunk Railway Company under s.s. (x) of sec. 12 of the Act respecting the Lord's Day. Sec. 12 provides that notwithstanding the other provisions of the Act, any person may on the Lord's Day do any work of necessity or mercy. Then in following clauses a variety of matters are declared to be included in the expression "work of necessity or mercy." S.S. (h) is as follows:

> "The continuance to their destination of trains
> "and vessels in transit when the Lord's Day begins."
> (k) "Work before six o'clock in the forenoon and
> "after eight in the afternoon of yard crews in hand-
> "ling cars in railway yards."
> (1) . . . "loading or unloading before 7 o'clock in
> "the morning or after 8 o'clock in the afternoon
> "any grain, coal, or ore carrying vessel, after the
> "15th September."
> (x) "Any work which the Board of Railway
> "Commissioners for Canada, having regard to the
> "object of this Act and with the object of prevent-
> "ing undue delays, deems necessary to permit in
> "connection with the freight traffic of any railway."

What the railway company asks is as follows:

> "The G.T.R. Co. hereby applies to the Board for an Order under sub-section (x) of section 3 of the Lord's Day Act, 6 Edward VII, Cap. 27th, as follows:
>
> "1. Permitting the said Company, by its servants, workmen, and agents, in order to prevent undue delay to traffic, to do on any Sunday, in Ontario, work incidental to the continuance to their destination of cars in transit at the beginning of each Sunday, notwithstanding that the said cars forming part of any train so in transit may not have a common destination, but may require to be switched, shunted, or otherwise dealt with for the purpose of being sent on to their several destinations.
>
> "2. Permitting the said Company to do, in Ontario, such work upon any Sunday as may be necessary for the purpose of furnishing to shippers of live stock, a continuous railway service, without which such persons would be unduly hampered and delayed in their said business.
>
> "3. Permitting the said Company to do, in Ontario, such work upon any Sunday as may be necessary for the purpose of furnishing to and from lake ports, a continuous railway service for carrying grain from elevators and vessels, and without which service such traffic would be unduly delayed.
>
> "4. Permitting, in the unloading of grain from vessels at lake ports, and the loading of grain into cars at such ports, and without which service such traffic would be unduly delayed."

This whole subject received most careful consideration by Parliament, and the Act as it stands is the result of compromises made by those holding divergent views upon the subject matter of the legislation, and any encroachment upon its prohibitions can be permitted only for the gravest and plainest reasons. The Board's jurisdiction arises only in connection with the movement of freight traffic; and as to that it is limited to such classes of work as it deems necessary to permit with the object of preventing "undue delay"; and in exercising jurisdiction, the Board is bound to have regard to the object of the Act. Of course the object of the Act is well known, and with its general intention of providing for a day of rest in every week all must be in entire sympathy; and in dealing with this application, this must be kept steadily in view. Parliament dealt very exhaustively with this vexed subject, and the statute was the result of much discussion and contention; a very large section of the community looks with a jealous eye upon the Act, and will regard with much concern any order that may be made enlarging its provisions and extending exceptions to its prohibitions. However, in the view I take, the railway companies cannot, under the Act or any order this Board may make, be left in any way masters of the situation, and may be called upon to justify any movement of freight that the order I think them entitled to may cover. In other words, the burden will be upon them to satisfy the court that the particular movement was necessary to prevent "undue delay," which in each individual case must be a question for the tribunal before which a prosecution may be launched. So, although Parliament has conferred certain powers upon this Board, the result of the section is, I think, that those who interest themselves in the enforcement of the Act may call the companies to account for anything done by them as a result of this application, and so control may be retained and no abuse made of privileges granted by the Board, even if such should be attempted.

Perhaps the most serious feature of this application is that referring to the grain trade. The development of this traffic has likewise received the most careful attention in Parliament, and millions of public and private money have been invested in its development—in the deepening and improvement of harbors, the enlargement of ships, the construction of canals, elevators, and lighthouses, the enlargement and extension of railway terminals, eliminating curves and lowering gradients—much of which has been compulsory by reason of the keen competition of the U.S. carriers. Along the U.S. lines, there are no Lord's Day laws to interfere with or temporarily check the flow. A continual struggle for this carrying trade exists between the routes through Ontario and those through U.S. channels. There may be some extremists who would prefer that this trade through Ontario gateways should be crippled rather than permit it to continue upon the Lord's Day; but I am mistaken in my estimate of the Christian people of the Province if there is not a very large majority that would make reasonable concessions to avoid undue interference with this traffic, were they satisfied of the existence of the facts that made such course reasonable. Now, under the Act as it stands, trains and vessels in transit when the Lord's Day begins, carrying grain, may continue to their destination; and after Sept. 15 in each year grain vessels may be loaded or unloaded before 7 a.m. or after 8 p.m. upon the Lord's Day; but it is said that this carrying trade cannot be retained for Canadian carriers if these limitations are to be strictly observed.

Turning now to the evidence given upon the hearing—Mr. Tiffin, Superintendent of the G.T.R. Northern Division, has under his control the ports of Midland, Collingwood, and Meaford; he says that in order to take care of the grain and by prompt movement protect the Canadian route, it is absolutely necessary to move empty cars upon the Lord's Day to release the vessels; that these latter must be loaded promptly, that they may return for other loads, and that if this is not done the vessel owners will carry to U.S. ports where they obtain a continuous service; that this would mean to the vessel owner a trip or two more in the season than to Canadian ports. The time of arrival of these vessels cannot be fixed, owing to weather and other conditions, and that he has seen on Sundays two vessels at Meaford, four at Collingwood, and six or eight at Midland—all waiting to be unloaded. This grain all passes through the elevators, and only one vessel can unload at a time at each elevator. The cars for this grain have to come to the ports empty; and when the elevator is full, the empties are required to receive the grain through the elevator from the ship, or unloading must stop. This grain comes from Port Arthur, Duluth, Chicago, and Fort William; and Mr. Tiffin says that at times they have been unable to handle this traffic even by working seven days a week; and that to prevent undue delay, after Sept 15 and for two months after the opening of navigation in the spring, it is necessary to haul the empty cars in train load lots through to the lake ports on the Lord's Day, load from the elevator, and start them to their destination.

Mr. Donaldson, Superintendent in charge of Depot Harbor, states that in years of good crops the railway has more grain to handle through that port than can be cared for by working seven days a week; that there are "tramp" vessels bringing grain to Depot Harbor that would go to U.S. ports, if they were impeded in unloading; their arrival cannot be timed, owing to fog, congested condition in the Sault Canal, and stormy weather; and that 14,000,000 bush. have been handled through Depot Harbor in one season. This is booked from Chicago, Milwaukee, Duluth, Fort William, and Port Arthur for sailings from Montreal by various steamships, in which space has been taken; and during the rush season it is absolutely necessary, in order to handle this traffic and preserve it over that route, to make movements upon the Lord's Day that are prohibited by the Act. A large amount of package freight from the New England States, New York, and Boston, also from Chicago and Milwaukee, passes through Depot Harbor. This is on the upper deck of the vessels and the grain below. The package freight has to be removed before the grain can be got at, and all this increases the difficulty connected with the unloading of grain vessels arriving at the week end. Mr. Donaldson says the competitive routes with his are those that run to Galveston, rail and ocean to Europe, and the lake ports to Buffalo and Toledo and other elevator points; the grain going via Buffalo continues whether Sunday intervenes or not; if that coming via the Canadian ports is held up for a day, a very serious handicap is put upon the Canadian carrier as against his U.S. competitor.

Mr. W. G. Brownlee, General Transportation Manager of the G.T.R., says that if they are prevented from taking empty cars to the lake ports on Sunday this season, his road will lose the carrying of 5,000,000 bush. of grain. While the mere money loss to a corporation not allowed to work its employes on the Sabbath may be of no moment, it seems to me the pecuniary loss to the G.T.R. by not being able to carry this grain is not the only thing for consideration. If it were, I should regard the evidence as of little value. If this grain cannot be carried by Canadian lines it will go through U.S. channels, and others will benefit at the expense of the country whose every effort has been put forth to acquire and

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NEW YORK AND PITTSBURG

hold this carrying trade; and so, instead of merely G.T.R. interests being involved, it is the larger question of the commerce of the country being at stake; and while I am not at all of the opinion that this is a reason for making a week-day of the Sabbath, I do think that some modification of the Act may be made so that this traffic may be retained, and yet that the minimum of Sunday work be permitted. The railways carrying grain from Georgian Bay ports are in competition not only with the U.S. railways, but also experience the keenest competition from the all-water routes, not only in the movement of eastbound grain, but in the westbound traffic Depression in lake traffic has diverted many vessels from the upper lake carrying trade to the longer routes to St. Lawrence points or through to Montreal. The movement of this year's crop will tax to the utmost the capacity of the rail carriers from Georgian Bay points; and to place themselves in a position to compete with some degree of success with other routes, and obtain a share of this carrying trade, special tariffs were filed by them with the Board, becoming effective Sept. 4, reducing the wheat rate to 5c. per bushel from Georgian Bay points to Montreal. It is manifest from the conditions above indicated and others that exist, that some degree of freedom, consistent with reason, should be extended to the rail carrier from Georgian Bay points. Others beside those who stand for strict Sabbath observance in Ontario are concerned in this matter. Freight rates to ocean ports are of vital interest to the Western farmer, and any barrier along the route reflects upon the price obtainable by him for his wheat.

Again, Ontario is a mere link in the route to the seaboard, and under the Act, as it stands, vessels and trains in transit through Ontario, when the Lord's Day begins, may continue to their destination. Grain vessels may continue loading or unloading up to 7 a.m., and may again resume after 8 p.m., after Sept. 15, upon the Lord's Day. It is sworn and not contradicted that the grain carrying trade cannot be carried on if stopped between 7 a.m. and 8 p.m. (except where vessels and trains are in transit). It does not seem reasonable, in view of the vast interests involved both to the carrier and to the whole country, that this traffic should be destroyed by undue delay.

The railway company asks permission to furnish to shippers of live stock a continuous service, without which such persons would be unduly hampered in their business; but upon this branch no evidence was given by any live stock shippers; and the facts given upon the hearing do not justify the Board in interfering with existing conditions.

The next request is that in order to prevent undue delay to traffic certain shunting be permitted on the Lord's Day. Subsection (h) of sec. 12 gives leave to continue to their destination "trains and vessels in transit when the Lord's Day begins, and work incidental thereto." The interpretation clause of the Act does not define the word "train." Sub-sec. 32 of sec. 2 of the Railway Act defines "train" as including any engine, locomotive, or other rolling stock. The applicants allege that great delay and loss will ensue if they are prohibited from continuing to their destination individual cars that may be in transit when the Lord's Day begins, and perform the work incidental thereto. Let a concrete case serve as an illustration: 20 cars of cattle leave Palmerston on Saturday evening, 15 for Montreal for export by steamer sailing on Monday, five cars for Toronto, where the train arrives at, say, 3 a.m. on Sunday. What was the destination of this "train?" It is contended the railway employes cannot leave the five cars for Toronto when the train arrives there, and carry the other 15 to Montreal, but must either hold the whole train at that point or take the five Toronto cars on to Montreal. To leave the five cars, means breaking up the train, and this, it is said, cannot be done. It may be said that the Toronto cars should not have been attached to the train, and so the difficulty was caused by those responsible for making up the train. Perhaps had another freight train been leaving Palmerston for Toronto to which the five Toronto cattle cars might have been attached, "undue delay" in getting those cars to Toronto might have been avoided by not mixing the Toronto and Montreal cars; but suppose the Toronto cattle had to be there for Monday morning, and no other train that could carry them was leaving Palmerston on Saturday night, it is manifest these cattle must be taken by special train, making a prohibitive freight rate, or not reach Toronto for Monday morning. I do not think any harm will follow, or any encroachment be made upon the spirit or object of the Lord's Day Act by giving the company liberty to leave the five Toronto cars at their destination, and continue to Montreal with the other 15 cars. Suppose this case actually occurred, and the company was prosecuted, it would still have to establish that the whole movement was necessary in order to avoid "undue delay," not only dropping the Toronto cars at that point, but the making up of the train in this manner at the starting point. Illustrations might be multiplied, many of which would show how this privilege might be abused by the railways in bringing to, say, Mimico upon various trains from different points cars destined to Montreal, and there sorting out the latter and making up an entirely new train. If this is attempted, the courts must say whether it was necessary to prevent "undue delay"; and so I think full control is retained and prosecutions will be effective in preventing abuse of privileges granted by this Board, and care exercised by those responsible for the operation of railways will prevent the public sense from being offended by unnecessary movement of freight trains on the Lord's Day.

After outlining the order to be passed by the Board, the Chief Commissioner continued:

It may not be uninteresting to note that in a report made to the Board on June 9, 1908, by one of its officials in dealing with the question as to whether the G.T.R. had during the previous year furnished adequate and suitable accommodation for the carrying, unloading, and delivery of traffic offered for carriage upon its lines, the following paragraph appears:

> "The effect upon the power of the Company to receive, carry, and deliver traffic without delay, in compliance with the provisions of the Lord's Day Act, will, in my opinion, mean a loss of 21% per week, or, in other words, the Company would move only 79% of its capacity during the week.'

◆

The I.C.R. employes have severed their connection with the International Brotherhood of Railway Employes, and have formed a Canadian organization on similar lines, with A. R. Mosher as President, and M. M. McLean Secretary-Treasurer, at Halifax, N.S.

At a recent meeting of the Quebec city council, on the question of introducing a by-law to prohibit the whistling by railway locomotives within the city limits, a letter was read from one of the Board of Railway Commissioners' solicitors, describing the protections at the various streets in the city crossed by the C.P.R., and informing the council that in the event of the passing of such a by-law, any further protections would be provided, but at the city's expense.

Great Northern Ry. Lines in Canada.

The annual report of the President of the G.N.R. contains the following information relative to the lines in which the company is interested in Canada, and the lines in the U.S. connecting therewith:

Brandon, Saskatchewan and Hudson's Bay Ry.—During the year under review there was laid 0.43 mile of side track, or spurs.

Midland Ry. of Manitoba.—On Dec. 16, 1907, there was opened for traffic a line from Walhalla, N.D., to the International boundary near Haskett, Man., 5.34 miles; and from Haskett to Morden, Man., 15.25 miles. This latter line is a portion of the various lines authorized to be constructed in Manitoba by the Midland Ry. Co. of Manitoba.

Crow's Nest Southern Ry.—The extension of the line from Fernie to Michel, B.C., 20.98 miles, was substantially completed May 1, but had not been finally opened for operation when seriously damaged by the Fernie fire of Aug. 2, 1908.

During the year under review the company laid 1.67 miles of new spur lines, or side tracks.

Nelson and Fort Sheppard Ry.—During the year under review the company laid 0.30 mile of new side tracks, or spurs.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—This is the title of the Canadian portion of the line which is being constructed in the United States, under the title of the Washington and Great Northern Rd., to give a direct connection between the G.N. Ry. and Vancouver. As the line crosses the International boundary at several points, the particulars respecting the two lines are included under the one heading: On Oct. 5, 1907, the line from Oroville, Wash., to the International boundary, 20.64 miles, was completed; as also was the line from the International boundary near Chopaka, to Keremeos, B.C., 18.20 miles. During the year the company purchased, with the approval of the Government, the line of the Vancouver, Westminster and Yukon Ry., extending from New Westminster to Vancouver, B.C., 17.28 miles, with its equipment; the completed line of the Victoria Terminal Ry. and Ferry Co., from Cloverdale to Port Guichon, B.C., 14.81 miles, with its equipment, and the line under construction by the last named company from the International boundary line near Blaine, Wash., to Mud Bay, on the constructed line between Cloverdale and Port Guichon, B.C., 11.32 miles. The completed lines were taken over as from July 1, 1907, and their earnings and expenses from that date are included in the income and expenditure for the past year. The purchase of the completed portion of the V., W. and Y. Ry. gives the company large and valuable terminals in Vancouver, including dockage on Burrard Inlet. The work of completing the line between Blaine and Mud Bay, and the line between Olivers and New Westminster, mentioned in the report for 1906-07 as being under construction by the V., V. and E. Ry., has been completed during the year, 17.13 miles of track having been laid June 30, and it was expected that the line would be completed by the time the report was issued. Work on the line between Cloverdale and Abbotsford, B.C., also mentioned in the previous report, has been continued, 5.75 miles of track having been laid to June 30, and the line was expected to be completed by Oct. 30. Grading on the extension from Keremeos to Princeton, B.C., 41 miles, is well along, and should be completed by the spring of 1909. This extension, when completed, will open up for development large coal fields and bodies of minerals. In order to properly use the V., V. and E. Ry.'s new

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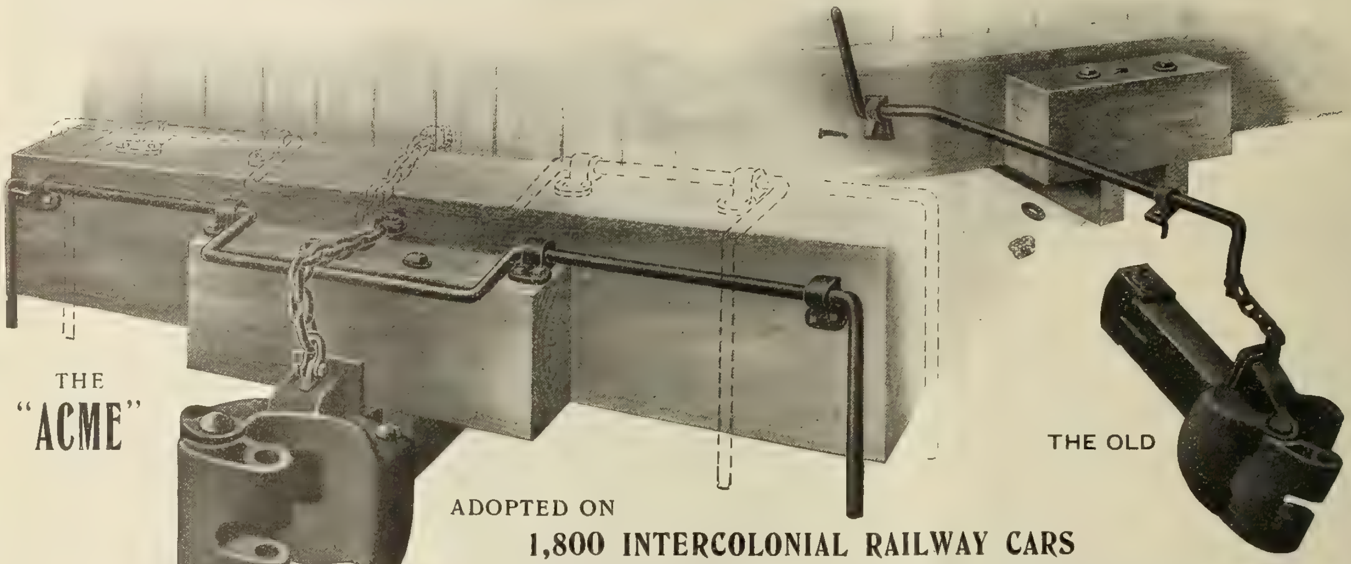
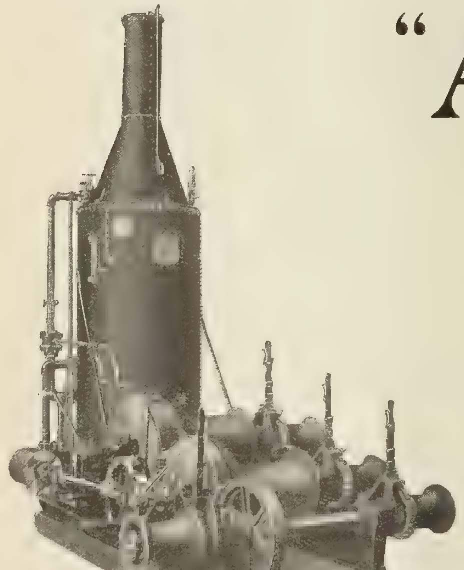


ADOPTED ON
1,800 INTERCOLONIAL RAILWAY CARS
50 TEMISKAMING & NORTHERN ONTARIO CARS
300,000 CARS IN STATES

DOUBLE HANDLE CALLED FOR "Where a coupler couples by impact, but cannot be uncoupled unless the brakeman or switchman goes between, or over, or under the cars, or around the end of the train, IN ORDER TO REACH THE APPLIANCE ON THE CONNECTING CAR, such a coupling is **DEFECTIVE AND PROHIBITED BY LAW."**—*Judge McPherson, Des Moines, Iowa.*



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Steam and Electric Hoists
Locomotive Cranes and
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line between the International boundary and New Westminster, when completed, the Great Northern Ry. is constructing on a new location 2.96 miles of line between Blaine and the International boundary.

During the year under review the company laid 1.16 miles of new spur lines or side tracks. In connection with this the company's mileage will be decreased by 0.14 mile, owing to the difference between the New Westminster Southern Ry., which has been abandoned, and the new Blaine-Mud Bay line.

In connection with the work of construction in progress on this line, P. Welch, Spokane, Wash., one of the contractors, was quoted as saying Nov. 5: "The line has been completed as far as Keremeos, and late this fall trains will be running to Hedley, 25 miles further. As work will be continued all winter, we expect to reach Princeton in May. Then the task of building over the Hope Mountains into the Fraser River Valley will be undertaken, and rushed to completion with all possible speed. It is a task to get over the mountains, but I am informed that satisfactory gradients have been secured. Southern British Columbia will be the scene of unusual railway construction activity next spring. The President of the G.N.R. is desirous of rushing to a completion the through line between Vancouver and the Boundary district. There yet remains to be closed the gap between Similkameen and Sumas, where the line connects with the Northern Pacific Rd., but this will be finished within the coming year.

In connection with the above it may be mentioned that J. M. Gruber, General Manager G.N.R., was in Vancouver, B.C., recently, having arrived there from the interior of B.C. He stated that the company's line between Cloverdale and Sumas was practically completed, and that by the time the line through the Hope Mountains, which was the most difficult part of the construction work in hand, was completed, the construction of terminals in Vancouver would be also finished, so that everything would be ready for the handling of through traffic. The work of construction in the Boundary country was being steadily pushed, but it was expected that this would all be fully in hand in the spring. The section yet to be undertaken extends from Similkameen to Sumas.

On Nov. 7 J. J. Hill, Chairman of the Board of the G.N.R., was the principal guest at a dinner given by the Vancouver Board of Trade. In the course of a speech he said: "It is a real live question whether it would not be advisable for the G.N.R. to make the terminus of its Trans-Pacific traffic at Vancouver, B.C., rather than at present, at Seattle, Wash., in view of the adverse ruling of the Interstate Commerce Commission respecting advance publication of rates for railway haulage of export business, as well as in view of the unsatisfactory character of the U.S. navigation laws. If we should take action in the direction indicated, our big ocean liner, the Minnesota, would be given a British register. What I say respecting our own steamship applies to other U.S. vessels engaged in the Oriental trade. The present handicap is too great to allow us to compete on even terms with our rivals." (Nov., pg. 799.)

Telephones on the Canadian Pacific Ry.

The various large railway systems on this continent have found that the use of the telephone very largely facilitates the handling of traffic. The C.P.R. has adopted it considerably, and the following outline of that company's system will be of interest. For long distance service a combination is made by which the telephone is worked simultaneously on telegraph circuits—the principal installation of this nature being the telephone circuit between Montreal and North Bay, Ont., 360 miles; one between North Bay and White River, Ont., 384 miles, and a third one to be installed next year between Fort William, Ont., and Winnipeg, 420 miles. These three circuits are operated on two through telegraph duplex circuits between Montreal and Winnipeg. Telephonic conversation can be carried on on each of the three circuits simultaneously with the exchange of four telegraph messages between Montreal and Winnipeg. Another installation of the same nature is between Medicine Hat and Calgary, Alta., 180 miles, which is worked on two telegraph duplex wires working between Calgary and Winnipeg. There are many shorter sections where the telephone is used in combination with the telegraph wires, for instance, between Montreal and Farnham, Que., Moose Jaw and Regina, Sask., and isolated points at which there is no telegraph operator located, and connecting such points with a nearby telegraph station. There are also a great many independent telephone circuits, for instance, one circuit connects together all the stations and general offices around the mountain at Montreal; independent telephone connection between the various ticket offices in Montreal and of the other cities. Practically the whole of the main line and a large part of the branches in British Columbia is traversed by independent telephone circuits connecting the various watchmen with each other and with telegraph stations. There is also a telephone circuit between Banff, Laggan, Lake Louise, Field and Emerald Lake. Last June the company put in operation a trial telephone circuit between Montreal and Farnham for the purpose of dispatching trains by telephone. This has proved such a complete success that the circuit has now been extended to Newport, Vt.. and it is expected that various other circuits of this nature will be installed during the coming year, though we are advised that no arrangements have yet been made for telephony dispatching between Montreal and Fort William as reported in the daily press. On all the train dispatching circuits and long distance telephone circuits, whether composite with telegraph circuit or an independent telephone circuit, the company uses pairs of copper wires weighing 210 lbs. per mile each, these wires being transposed in their location on the poles every half mile.

As stated in a recent issue it is the intention to equip the trains between Montreal and Newport, Vt., with telephones.

December Birthdays.

Many happy returns of the day to—

E. Alexander, Assistant Treasurer C.P.R., Montreal, born in Yorkshire, Eng., Dec. 8, 1862.

J. H. Barber, Engineering Department C.P.R., Montreal, Que., born at Cobourg, Ont., Dec. 20, 1856.

N. E. Brooks, C.P.R. Division Engineer, Calgary, Alta., born at Sherbrooke, Que., Dec. 25, 1866.

J. C. M. Buntzen, Director British Columbia Electric Ry. Co., Copenhagen, Denmark, born there Dec. 16, 1859.

T. C. Burpee, Engineer of Maintenance of Way, Intercolonial Ry., Moncton, N.B., born at Sheffield, N.B., Dec. 11, 1852.

W. W. Butler, 1st Vice-President Dominion Car and Foundry Co., Ltd., born at Danville, Ohio, Dec. 9, 1862.

M. M. Campbell, C.E., Inspector National Transcontinental Ry., St. Claire, Que., born in Scotland, Dec. 7, 1879.

Capt. G. C. Coles, of F. W. Churchill & Co., C.P.R. Ticket Agents, Collingwood, Ont., born at Biddlestone Rectory, Wiltshire, Eng., Dec. 15, 1859.

H. P. Dwight, President Great Northwestern Telegraph Co., Toronto, born at Belville, Jefferson Co., N.Y., Dec. 23, 1828.

R. Forget, M.P., President Richelieu and Ontario Navigation Co., Montreal, born at Terrebonne, Que., Dec. 10, 1861.

H. H. Gildersleeve, Manager Northern Navigation Co. of Ontario, Collingwood, born at Kingston, Ont., Dec. 15, 1865.

A. J. Gorrie, ex-General Superintendent Canadian Northern Quebec Ry., now Managing Director Geo. Hall Coal Co., Montreal, born at Raith, Kirkcaldy, Scotland, Dec. 10, 1868.

W. H. Grant, Manager of Construction, Mackenzie, Mann and Co.'s Eastern Lines, Toronto, born at Acton, Ont., Dec. 8, 1858.

F. P. Gutelius, General Superintendent Lake Superior Division, C.P.R., North Bay, Ont., born at Mifflinburg, Pa., Dec. 21, 1864.

D. B. Hanna, President Quebec and Lake St. John Ry., Third Vice-President Canadian Northern Ry., Toronto, born at Thornliebank, Scotland, Dec. 20, 1858.

S. P. Howard, General Freight Agent Eastern and Lake Superior Divisions C.P.R., Montreal, born there Dec. 30, 1865.

R. R. Jamieson, ex-General Superintendent Western Division, C.P.R., Calgary, Alta., born at Westover, Ont., Dec. 12, 1856.

B. B. Kelliher, Chief Engineer Grand Trunk Pacific Ry., Montreal, born in Ireland, Dec. 26, 1862.

W. Kennedy, Superintendent Motive Power Central Vermont Ry., St. Albans, Vt., born at Belleville, Ont., Dec. 23, 1869.

L. Macdonald, Division Freight Agent G.T.R., Toronto, born at Montreal, Dec. 10, 1871.

J. T. McGrath, Master Mechanic G.T.R., Battle Creek, Mich., born at Toronto, Dec. 6, 1869.

J. Niblock, Superintendent C.P.R., Calgary, Alta., born in York County, Ont., Dec 21, 1849.

E. C. Oviatt, Travelling Passenger Agent C.P.R. and M., St. P. and S.S.M. Ry., Battle Creek, Mich., born at Hudson, Ohio, Dec. 3, 1852.

A. Price, General Superintendent Western Division, C.P.R., Calgary, Alta., born at Toronto, Dec. 6, 1861.

C. Schreiber, C.M.G., Consulting Engineer Department of Railways and Canals, Ottawa, Ont., born at Bradwell, Essex, Eng., Dec. 14, 1831.

F. P. Smith, Secretary Richelieu and Ontario Navigation Co., Montreal, born there, Dec. 23, 1873.

C. E. E. Ussher, Assistant Passenger Traffic Manager, C.P.R. Western Lines, Winnipeg, Man., born at Niagara Falls, Ont., Dec. 29, 1857.

H. H. Vaughan, Assistant to Vice-President C.P.R., Montreal, born at Forest Hill, Essex, Eng., Dec. 26, 1868.

W. Wood, locomotive foreman, C.P.R., Megantic, Que., born at Montreal, Dec. 6, 1863.

The Canadian Northern Quebec Ry. is being sued for $22,140 damages, alleged to have been sustained by the Laurentide Paper Co. through the alleged wrongful damming of the St. Maurice River at Grand Mere, Que. In 1897 the railway company erected a bridge across the St. Maurice River at Grand Mere, a portion of which was subsequently destroyed, and rebuilt in 1904. It is claimed that in the re-erection, the space between the piers was not left open as before, and that the trellis work was extended across the river, on account of which the water was dammed and occasioned the closing of the Paper Co.'s works for several weeks in the spring. The plaintiffs also ask for the removal of the portion of the bridge not in accordance with the authorized plans.

THE ELECTRIC HEADLIGHT

The following letter was received under date of May 8, 1908, from Mr. J. W. Cleary, Travelling Engineer Pyle-National Electric Headlight Co.:

"I learn from ____________________ the Master Mechanic here, that an engineer running between ________________ and ________________ discovered a broken rail with the Pyle-National Electric Headlight and made the stop without ditching his train. One or two pairs of wheels got off, but that was a small affair to what it would have been where a foot of the rail was broken off. Also an engineer running east of here found some cars shoved out on the main line. He saw them with the 'Electric' and made the stop without hitting them."

PYLE-NATIONAL ELECTRIC HEADLIGHT CO.
MONADNOCK, CHICAGO

POLSON IRON WORKS
LIMITED
TORONTO, CANADA

Steel Shipbuilders, Engineers and Boilermakers

Hydraulic and Dipper Dredges, Steel and Composite Steamers and Yachts, Marine and Stationary Engines and Boilers

OFFICE AND WORKS

ESPLANADE STREET EAST, TORONTO

G.T.R. Semi-Annual Meeting.

At the half-yearly meeting of shareholders, held in London, Eng., Oct. 8, the President, Sir C. Rivers Wilson, in presenting the report for the half-year ended June 30, details of which were given in our Nov. issue, said: It has not often occurred during recent years that your directors have had to lay before you at the general meeting an unsatisfactory record, but we have lately been passing through a very trying period. Our company, like many other companies and many other industries, has been severely affected by the acute depression of trade and business of all descriptions which has prevailed throughout the continent of North America, and from which our own country and other European countries are also suffering such painful experiences. A retrospect of our operations during the last year must, therefore, be necessarily of a somewhat disappointing character. Disappointing, I say, but not discouraging, because I feel satisfied that the worst is over, and an examination of the accounts will show you the efforts which have been made, and I venture to think not unsuccessfully, to mitigate the evils from which we have been suffering.

The gross receipts for the half-year were £2,919,192, a decrease of 13.67%. The receipts from passenger traffic were £841,503, a decrease of £47,778, and the number of passengers carried was 4,800,036, a decrease of 135,980. The average fare received per passenger decreased from 43.24d. in 1907 to 42.07d. in 1908, per passenger. The receipts from mails and express traffic were £136,584, compared with £142,202 in 1907. The receipts from freight and live stock traffic were £1,854,408, a decrease of £417,540, and the tons of freight moved were 7,223,000, a decrease of 1,287,574, and the rate received per ton was 61.62d., a decrease of 2.45d. per ton. The miscellaneous receipts, on the other hand, were £86,697, compared with £77,828 in 1907. The decreases are, no doubt, very large, but it is some satisfaction to know that, at any rate, we have not suffered to such an extent as the majority of our neighbors. The receipts of the G.T.R. decreased to the extent of 13.67%, or, taking the whole system, to 13.52%, but I find that taking practically the whole of the railways in the U.S. and Canada —141 roads—the decrease in the receipts averaged 16.58%, and taking the 14 trunk lines, with which we more particularly come into competition, I find that the decrease was even greater, and amounted to no less than 18.16%.

The working expenses were £2,137,288, a decrease of £349,256, the proportion of the expenses to the receipts being 73.22%, a decrease of 0.32%. With regard to the proportion of expenses to the receipts, I find that the G.T.R. compares favorably with other railways, and whilst avoiding comparison with individual railways, it is only right to state that the ratio on the G.T.R. is less than the average rate on the whole of the railways on the North American continent, and considerably less than the average rate of the trunk lines, that is to say, the lines between Chicago and the seaboard, with which we are more particularly in competition. In most cases there was an increase in the percentage proportion, whereas in our case there was a slight decrease. I rather insist on these comparisons, because they afford a reasonable answer to the complaints which are frequently made as to the supposed extravagance of the management. The expenditure on maintenance of way and structures was £246,575, a decrease of £41,096. The decrease was practically spread over the whole of the items in the accounts, with the exception of the cost of clearing snow, which showed an increase of £4,370. The charge for maintenance of equipment was £387,520, a decrease of £265,765. Of this decrease, £109,838 was in respect of the maintenance of engines, and £155,927 in respect of the maintenance of cars. Owing to the considerable falling off in the traffic, and the consequent surplus of engines and cars, it had, of course, not been necessary to expend money on the maintenance of rolling stock not required, and the work in the shops has been materially reduced, not by discharging the men, but by placing them on short time, and, in addition, the charge in respect of the engines and car renewal account has been suspended, and in consequence, and owing to the deliveries of additional stock, that account has increased by £105,253, and is now £443,429, which is covered by the surplus of engines and cars shown. With the prospect of better times, owing to the good harvest and the improving condition of business generally, instructions have been given for the resumption of full time in the shops, so as to have the stock in efficient order to meet the requirements of the traffic. The expenditure under the head of conducting transportation was £1,368,954, showing a saving of £18,389. This reduction, which appears small in view of the reduction in the traffic, would have been greater but for the increased price of fuel used, which represented £21,000, and the increased rates of wages of practically all descriptions of employes, which came into operation at the close of the corresponding period of 1907. These alterations in wages are made in most cases for fixed periods, and recently, as the result of arbitrations under the Canadian labor law, and it is, therefore, impossible to make effective reductions immediately on any falling away of business; in fact, in this particular half-year the increased rates of pay have, to a considerable extent, neutralized the reductions we have been able to make in the number of employes and the reduction represented by the reduced train mileage. It must also be remembered that passenger trains must be run, although the number of passengers may be less, and that it is necessary to run additional trains in order to develop the business in various parts of the system. The general expenses showed a decrease of £24,359, and the taxes a slight increase of £353. The result of the working has been, therefore, that the decrease of £462,067 in the gross receipts has been reduced by the decrease of £349,256 in the working to a net decrease of £112,811, the net traffic receipts being £781,904, compared with £894,715 in 1907.

To sum up the question of expenditure. In the last half-year the management have been able to effect savings amounting to £350,000. This has not been done without great effort and much anxiety, and I think the shareholders will appreciate the work which has been done by the General Manager and his officers to meet the emergency. If we have been able to effect these large savings during this period of depression without in any way impairing the efficiency of the service, it has been owing to the large expenditure which has been incurred during the good times for putting the property into a thoroughly sound condition, an expenditure at which some of our shareholders have indulged in an occasional grumble, but of which we were convinced, when making it, we should feel the advantage when business became bad and traffics fell off, and this is what has actually happened. The net revenue credits were £123,767, which, added to the net traffic receipts of £781,904, make the total net revenue £905,671, of which £609,711 was absorbed in the payment of the interest on bonds and debenture stocks, leaving a surplus, as the result of the working of the G.T.R. proper, of £295,960; but from this there has to be deducted the deficiencies of £68,892 on the Canada Atlantic Ry., and £46,574 on the Detroit, Grand Haven and Milwaukee Ry., reducing the amount to £180,494, and adding to that amount £6,754 brought forward from last year, we have £187,248 available for dividend. The actual expenditure on capital account was only £121,218. This is made up of £29,000 for new works, the most important being the reconstruction of our important works at Stratford; £89,000 on account of double track, almost all between St. Lambert, on the east end of the Victoria Bridge, and Ste. Rosalie, and a small balance representing a few land purchases.

Our subsidiary companies naturally reflect the bad times upon which the parent company has fallen. The Canada Atlantic Ry., however, makes a rather better showing than last year. It is true that the gross revenue fell off by £15,791, but, on the other hand, the officers were able to reduce the expenditure £34,699, and the consequence is the net revenue deficiency about £19,000 less than last year. The G.T. Western Ry. shows a large falling off in revenue—the loss in gross revenue was £85,294, but the expenses have been reduced by £38,729; fortunately, we have received for excess rentals paid by the belt line to the Chicago and Western Indiana Rd.—one-fifth of which is held by the G.T. Western Ry.—something like £53,000, which has enabled us to put the finances of the G.T. Western for the year completely straight, enabling us to pay the full interest on the debentures and also on the income bonds. The Detroit, Grand Haven and Milwaukee Ry. shows a gross falling off of £22,000. The expenses have increased by £12,000, but that is owing to special circumstances, viz., the work of elevating the tracks in Detroit in common with other railways.

Of the G.T. Pacific Ry., I have to report that great progress has been made on our portion of the line, that is to say, between Winnipeg to the west and on the Lake Superior branch. The general conditions prevailing during the year have been much more favorable than during previous years since the actual starting of the work, owing to there being sufficient labor and its quality having improved. The general depression has also made it possible to secure more prompt delivery of the material which we require. The Lake Superior branch will be entirely completed next month, that is to say, the road which runs from Fort William up to Lake Superior Jct., where it joins the Government road, and when it is completed a great advantage will be gained immediately in the construction of the road from Winnipeg to Lake Superior Jct., by enabling the contractors to transport all their materials over this road. At Winnipeg, great progress has been made with the laying out of the yards and the preparation of the terminals. We occupy jointly with the C.N.R. 70 acres in the heart of Winnipeg. In the meantime, the road has been completed from Winnipeg west for 675 miles up to the Battle River, and trains are already running now between that point and Winnipeg. In the course of next month the bridge, it is expected, will be completed across the Battle River, and the road will be finished into Edmonton, another 118 miles, so that before the end of the year we anticipate that trains will be running regularly and carrying freight and passengers between Edmonton and Winnipeg. Westward of Edmonton there remain 123 miles to complete the Prairie section, which terminates at Wolf Creek. Progress is also being made upon the Mountain section to the town, I may call it at present, but it will some day be a great city, of Prince Rupert. Settlers are flocking into Prince Rupert. A large amount of equipment has been already supplied. Something like 7,000 freight cars have been delivered, and about 40 passenger cars, besides a large number of engines.

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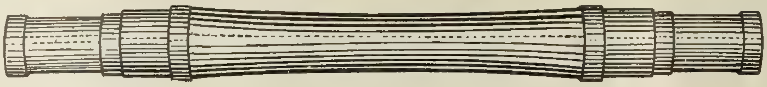

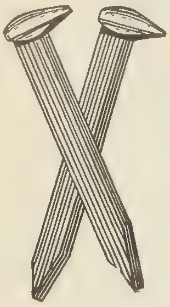

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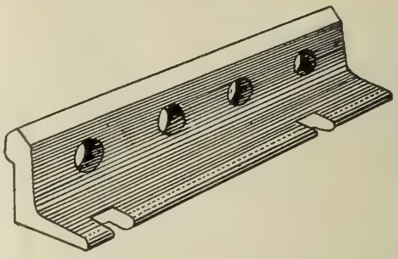

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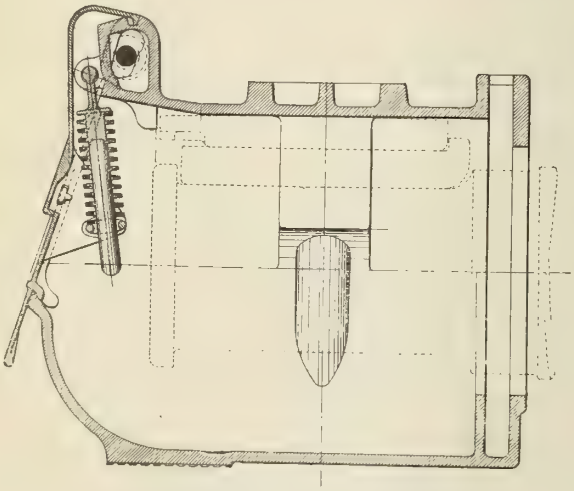

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most of you, I am equally sure, will appreciate the great difficulties they have to contend with; but, at the risk of being tedious—for I have often spoken to you upon this subject before—I must again earnestly impress upon you that the conditions under which Canadian and U.S. railways are worked are becoming more onerous every year. The difficulties of combining with a due consideration for the requirements of the public a regard for the just claims of those who have provided the means by which these great undertakings have been created and maintained, are becoming more and more intense, and it is only proper that shareholders should understand and fairly weigh the various elements of the problem of handling a great railway in this and in other countries with efficiency and economy. Apart from the keen competition to which a railway is exposed—and which is wholesome alike in the interest of the railway and of the public it serves, but which, naturally, is in restraint of profit—apart also from the question of the continual increase in the price of materials, two great conflicting interests, hostile to the railways, are always at work. The manufacturers and shippers seek by every means in their power, and by the use of every influence they can command, to force down the rates for which the railway is to carry their goods and merchandise. On the other hand, the workers on the railway, of all classes, by means of their great labor combinations, bring tremendous pressure on the railway managers to increase their scale of remuneration. Each of these interests is in truth more powerful—as has been proved over and over again—than the greatest and most powerful of the railway companies. Nor, am I bound to say—and I speak alike of Canada and the U.S.—do the railways receive from Governments or municipalities the consideration and protection to which they are entitled, looking to the immense services which they render to the community. Whether it is a question of lowering the rate on a particular class of commodity, or yielding to the clamor of a particular class of employes, I do not hesitate to say that the sympathy of authorities is generally with the claimants and against the railway, and so concession after concession is extorted from the company, which, in the long run, renders the task of the management, in doing justice to the proprietors by earning for them only a moderate return on their capital, one of extreme and ever-increasing difficulty and anxiety. Of the two interests I have alluded to, I am inclined to think that it is the labor interest which is the less antagonistic, and the less injurious to the railways, and I am informed that there is actually a movement among the brotherhoods of railwaymen in the U.S. protesting against the tendency of the Interstate Commerce Commission to restrain the companies from increasing freight rates, even in times of distress such as those we have been lately encountering. Of course, their idea is to meet the objection of the companies that the lowness of rates renders it impossible for them to concede the demands of labor, but, anyhow, we should cordially welcome assistance from whatever quarter which would tend to relieve a portion of the burden now imposed upon us. An extremely small increase in the charge for transport rates, which would be hardly appreciable either to the producer or the consumer, would not only enormously facilitate the task of the railway managers and enable them to secure a more reasonable return on the capital invested, but would, I am convinced, tend to give an impetus and encouragement to business. There is no doubt that the disabilities under which U.S. and Canadian railways have been laboring have contributed to the recent disturbance of business. Crippled, as they have been, in their earning power, they have been obliged to suspend orders for rails, for ties, and general materials of all sorts, the resumption of which—had they a freer hand as to the fixing of rates—would go far to relieve the present stagnation in some of the most important industries in the country. An interesting and instructive correspondence has recently been published between the Manufacturers' Association of New York, one of the most important corporations in America, and W. C. Brown, senior Vice-President of the New York Central Rd., in which these various considerations were urged with great force, remarkable ability, and abundant detail of illustration by Mr. Brown, whose excellent statement, however, was met by the Association with generalities, platitudes, and threats. His arguments were not answered, and his facts were not challenged. It is, however, satisfactory to know that the unfairness of the present state of things is attracting attention, and we can only hope that the efforts which are being made to obtain better treatment may meet with some success, alike in the interests of the railways and of the public in general.

I conclude, as I commenced, by asserting that our position is very far from being discouraging. There are already signs that the clouds are passing away, and that we have reason to anticipate an early resumption of good times and of good business. A fair indication of the progress and activity of railway business is afforded by an observation of the number of freight cars in active employment from time to time. At April 30 last, at the worst period of the depression, 8,336 freight cars were standing idle in G.T.R. yards. This number has now been gradually reduced, until at the last period of which I have notice—only a very few days ago—the number out of employment was reduced to 2,120. I think that is a satisfactory proof that business is reviving. Instead of an extremely deficient harvest, as was the case last year, the harvest of the present year is exceptionally abundant, with the result that not only will there be freight to be carried by the railways, but that money will come into the country to pay for the grain, which will give a stimulus to trade by increasing the spending power of the people. Then, as soon as the U.S. Presidential campaign is concluded—at the beginning of next month—one of the causes of the stagnation of business, which invariably accompanies these periodical political agitations, will cease; and finally, you will have observed that the decreases of our revenue returns have been sensibly diminishing for the last seven or eight weeks; and you will also remember, when you look at those returns, that they compare with the exceptionally high revenue returns of the very prosperous year of 1907. I think these various considerations will bring you to the conclusion, which I myself have arrived at, that there is every reason to be satisfied with our prospects.

The President then moved the adoption of the report, and that a dividend of 2% be paid on the 4% guaranteed stock. After a little criticism of the accounts, which was of a minor nature, the resolution was unanimously adopted.

◆

The Court of Appeal has quashed the indictment against the C.P.R. and the G.T.R. in the reserve case stated by Judge Winchester from the September sessions at Toronto. The railway companies were indicted for negligence, which it was alleged resulted in the death of several people at the Bay St. crossing, May 24, 1907. The case was tried at the sessions, and the jury returned a verdict of guilty. A reserve case was stated, on the ground that the two corporations could not be jointly indicted, and because the matter was entirely within the jurisdiction of the Board of Railway Commissioners, whose consent had not been asked.

C. P. R. Betterments, Construction, Etc.

Walkerton and Lucknow Ry.—The Reeve of Tiverton, Ont., has received a letter from D. McNicoll, Vice-President C.P.R., stating that the Traffic Department's representatives would at once be sent over the route between Walkerton and Tiverton, to ascertain what business the country would provide. If the report was favorable, engineers would be sent out to locate a route.

St. Mary's and Western Ontario Ry.—Permission has been granted to the company to cross certain streets in St. Mary's, Ont., with a spur line to serve some industrial concerns.

Komoka to Sarnia, Ont.—D. McNicoll, Vice-President, denied, Nov. 9, the press reports that the company was about to construct a branch line from Komoka, on the Toronto-Windsor line, into Sarnia. This report has been in circulation in some form or other for the past five or six years.

The St. Mary's and Western Ontario Ry., which at present extends from St. Mary's to Embro, Ont., has been surveyed westerly through Parkhill and other points towards Sarnia, but at present nothing appears to have been decided in the way of construction.

Fort William, Ont.—W. Whyte, Second Vice-President, and several other officials, were in Fort William Nov. 4, in conference with the city council respecting a new agreement. The term of exemption from taxation under the existing agreement expires next year, and the object of the conference was to arrange terms for its removal. The city asks for the construction of a bridge across the Kaministikwia River; larger works, a new station, 300 ft. of river frontage easily accessible, in return for which a fixed taxation for a period of years would be given.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—An officer of the company is quoted as saying that rapid progress is being made with construction on the branch line under construction from Brooten, Minn., northeasterly, via Superior, Wis., to Duluth, Minn., effecting a junction there with the Duluth, Lake Superior and Atlantic Ry. It is expected to have the grading completed to within 39 miles of Superior this season. Construction will be started, it is hoped, in the spring upon the yards and terminals. (Nov., pg. 781.)

Winnipeg to the Coast Second Track, etc.—With respect to the press despatch from Winnipeg, dated Oct. 16, quoted in our last issue, regarding the proposed double-tracking of the line westerly from Winnipeg, and the operation of trains in the Mountain section by electricity, it is understood that the company has not seriously contemplated the undertaking of the double-tracking of the line from Winnipeg through to the coast. The work is in the future, but it is not yet included in the company's programme of work to be immediately taken in hand. The question of the adoption of electricity as a motive power in the Mountain section is also in the future. In common with those of other railways on the continent, the C.P.R. officials are always on the lookout for new ideas which would reduce the cost of conducting transportation, but it is not yet considered that the development of electricity as a motive power on long stretches of line has reached such a stage as would warrant its adoption on such a line as the C.P.R. At any rate, we are advised, that the C.P.R. has not reached any decision as to the adoption of electricity as a motive power on its Mountain section.

Central Division Betterments, etc.—We are advised that during this year's construc-

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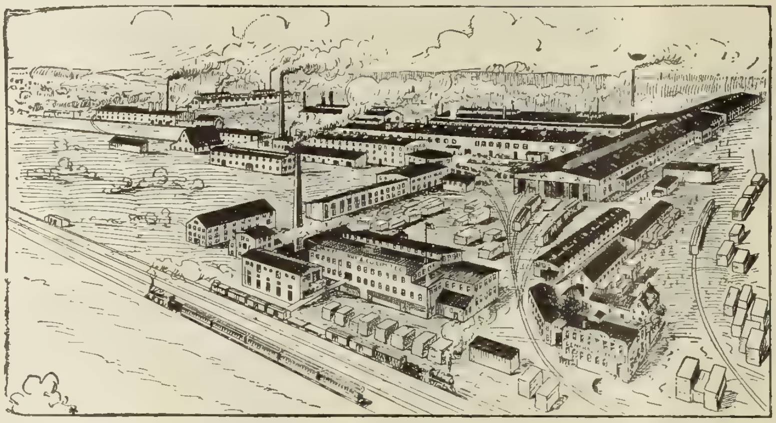

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tion season the following works have been started, progressed with, or completed:

Completion of double-track between Fort William and Winnipeg; completion of line from Strassburg, on the Kirkella branch, to Saskatoon; completion of grading from Saskatoon to Hardisty, and completion of tracklaying from Saskatoon to Wilkie; completion of Wolseley-Reston line; completion of line from Teulon to Komarno, 20 miles; construction of a line from Virden northerly for 10 miles; commencement of grading from a point 20 miles north of Teulon to the Icelandic River.

Buildings.—New engine houses at Minnedosa and La Riviere, Man.

Roadbed and Track.—Relaying Souris branch with 85-lb. steel.

Miscellaneous.—Icehouse at Fort William, capacity 4,000 tons; installation of cable for operating coal cars at coal dock, Fort William; erection of Y.M.C.A. building at Kenora; experimental forestry farm at Springfield; new pumping station at Portage la Prairie; deep well to supply water to Winnipeg station and Royal Alexandra Hotel; new pipe line and water tank at Broadview; new stock yards at Neudorf; new pipe line for water supply at Reston; Hirsch and Oxbow; experimental tree planting at Wolseley.

Kirkella Branch.—The branch line which hitherto terminated at Strassburg, Sask., was opened for traffic to Lanigan Nov. 3, where connection is made with Saskatoon. The extension is 54.3 miles long, and is being operated on the Last Mountain section, which is now 148.7 miles long.

Shops at Sutherland, Sask.—Press reports state that the company proposes to lay out yards and build shops at Sutherland, Sask. Sutherland is a station on the line 3.6 miles easterly from Saskatoon.

Western Division.—We are advised that during this year's construction season works have been done on this division as follows:

Completion of line from Moose Jaw to Outlook; change of line between Lethbridge and Macleod; construction of steel viaduct over Belly River, 5,000 ft. long, 313 ft. high, and containing approximately 12,000 tons of metal; reducing grade from Swift Current to Pashley, on Medicine Hat section.

Terminals. — Enlarged Coleridge yard; new freight shed at Strathmore on the Calgary section; new station at Woodpecker; subways at First Street W., and Second Street E., Calgary; extension to terminal yards at Strathcona, Edmonton branch.

Bridges.—Replacing old bridges with steel spans on concrete abutments at the following points: 3.8, Moose Jaw section; 5.0, 11.8, 13.5, 98.2, 99.9, 102.2 and 105.5, Swift Current section; 30.1 (10 ft. concrete arch), 33.9, 35.8, 61.8, 61.5, 86.4, 118, Medicine Hat section. Substituting small pile bridge for concrete arch, and replacing cedar culverts with concrete pipes on the Calgary section.

Roadbed and Track.—Ballasting and widening dump on the Calgary, Medicine Hat and Lethbridge sections; passing siding at Purple Springs; relaying Crow's Nest and Sirdar sections with 80-lb. steel.

Miscellaneous.—New section houses on the Calgary section; drilling large well for water supply at Cummings; new pipe line and pumping station at Suffield; experimental tree planting at Gleichen and Herbert; new stock yards at Brooks; new icehouse at Strathcona; new bunk house at Red Deer; erection of cottages for employes on the Cranbrook section; new pipe line and tank for water supply at Frank.

Moose Jaw to Conan.—The branch line from Moose Jaw, Sask, which is under construction, to a junction with the Lacombe branch of the Calgary and Edmonton Ry., was opened for traffic Nov. 3, to Conan, 91 miles. The stations on the line are: Belbeck, mileage 8.1; Tuxford, 15.2; Marquis, 22; Keeler, 30.5; Eyebrow, 44.8; Tugaski, 52.8; Bridgeford, 60; Artkow, 67.5; Elbow, 76; Loneburn, 84; Conan, 91.

Edmonton Northerly.—We are advised that the reports from Edmonton, quoted in our last issue, that the C.P.R. was massing construction outfits and material north of that city to start construction upon a line to the Peace River, are erroneous.

Electricity on the Mountain Section.—A Montreal dispatch Nov. 13 says: "The revision of plans for the electrification of the C.P.R. lines in the mining districts of southern British Columbia will be completed in a few days, and it is anticipated that before very long the work of changing from steam to electricity as motive power will be inaugurated."

In reference to the foregoing we are officially advised that no change has been decided on in connection with the motive power on the company's Southern B.C. lines. Of course the management is always looking into these matters, but there is no foundation for the report that the company contemplates the electrification of its lines in the territory mentioned in the immediate future.

Fernie Station.—A contract is reported to have been let to C. J. Digby, Fernie, B.C., for the erection of a new station and freight sheds at Fernie, B.C. The freight sheds, it is said, will be completed during Dec., but the new station will not be completed until the spring of 1909.

Pacific Division.—We are advised that during this year's construction season work has been done on this division as follows:

Changing grade between Field and Hector, reducing the gradient from 4.5% to 2.2% compensated; completion of line from Wellington to Alberni (Esquimalt and Nanaimo Ry.)

Terminals.—New fire heating system for engine houses at Revelstoke and Field; building new fire hall at Vancouver; extensions to freight shed at Vancouver.

Bridges.—Replacing old bridges with steel spans at the following points: 65.6, 73.1, 108.4 on the Laggan section; 94.8, 107.83, 108.1, 115.4, 121.3, 132.5 and 144.4 on the Cranbrook section; 77.5 on the Sirdar section; 179.4, 108.4, and 137.3, on the Mountain section; 93.9 on the Shuswap section; 1.2 on the Revelstoke and Arrow Lake branch; 26.4 on the Slocan section; 41.8 on the Boundary section. Replacing the present Howe truss spans and wooden piers over the Fraser River with steel span costing $250,000; replacing the present Howe truss spans and trestle approach at bridge 36.4, Boundary section, with steel viaduct, cost $85,000. Also the following on the Esquimalt and Nanaimo Ry.: 29.8, 35.6, 39.3, 47.9, and 65.1, and replacing all wooden box culverts on the line.

Roadbed and Track.—New outfit spur on the Cascade and Thompson sections; relining tunnel 104.4 Thompson section with concrete.

Miscellaneous.—New pipe lines and pumping stations at Roger's Pass, Ross Peak, Illicillewaet, and Enderby.

Nicola, Kamloops and Similkameen Ry.—A survey has just been completed by H. E. Carrey, of a route for the extension of this line now in operation between Spences Bridge and Nicola, to Penticton, B.C. Mr. Carrey has been in the field since April, and he has located a line of 160 miles between the two points. It is stated that excellent gradients have been secured. The route lies through the Similkameen Valley and into the Okanagan Valley, where it skirts the town of Summerland and on to Penticton. The report and plans are being prepared for submission to headquarters. It is reported to be the ultimate intention of the company to extend the line through to Midway, where connection will be made with the Columbia and Western Ry., so as to give a through route via the Crow's Nest Line, and several surveys have been made for the route between Midway and Penticton.

Vancouver Station.—We are advised with respect to the report as to proposed extensions at Vancouver station, referred to in our last issue, that no changes such as are mentioned are contemplated at present. The company is merely investigating to ascertain what should be done to meet future needs.

Index to The Railway and Marine World.

A complete index to the matter contained in the Railway and Marine World for 1908, Jan. to Dec. both inclusive, is in course of preparation, and will be printed and ready for distribution early in Jan., 1909. The index for 1907, issued in Jan. last, met with much favor, and we have no doubt the one for the current year will be equally appreciated. A large portion of the matter we publish from month to month is of great permanent value for reference, and of course this value is much enhanced by a complete classified index. We were much gratified when we issued our index for 1907 to find that a large number of subscribers file and bind the paper.

It is not the intention to make a general distribution of the current year's index, but a copy will be sent to each subscriber who desires one, and who will notify us to that effect. A letter or post card, simply stating that the index is desired, and giving the subscriber's name and address, will be sufficient. Early application is requested, and subscribers who wish a copy are asked to write us at once. "Do it now." The number of copies to be printed will be governed by the number of applications received.

Car Surpluses and Shortages.—The report of the committee on car efficiency of the American Railway Association for the period ended Oct. 28, shows that the total surplus available was 110,912, a decrease of only 4,124 since the last report. The shop cars, however, show a decrease of 14,000, making a net improvement of about 18,000 cars. Four companies reported in the Canadian group, the surpluses being: 534 box cars, 470 flat cars, 20 coal, gondola and hopper cars, and 559 other kinds, making a total of 1,583 cars of all kinds against 1,881 cars of all kinds at the date of the last report, Oct. 14. The shortages were: 5,349 box cars, 20 flat cars, 2,015 coal, gondola and hopper cars, a total of 7,384 cars of all kinds, against a total of 6,993 at the date of the last report.

Press reports state that the Board of Railway Commissioners is establishing inspecting divisions throughout the Dominion with a view to the more prompt and efficient inspection of railway equipment and enquiry into accidents, and that the following inspection divisions and appointments have been made: Maritime Provinces and Quebec, E. C. Lalonde; Ontario, J. Clark and J. Ogilvie, with headquarters at Ottawa; Manitoba and Saskatchewan, W. G. Blyth; Alberta and British Columbia, M. J. McCaul. We are officially advised that the reports are substantially correct. The headquarters of the various inspectors, however, have not as yet been fixed, and the matter is still under consideration by the Board. The division of the work as quoted is stated as not necessarily arbitrary, but to indicate the lines on which the Board proposes to act.

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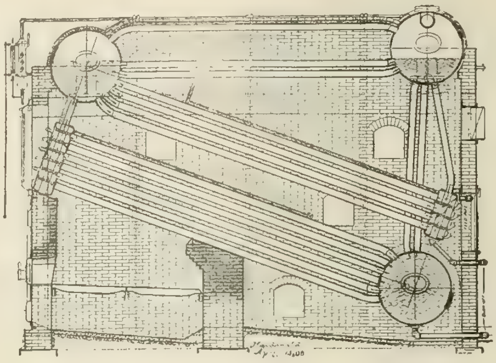

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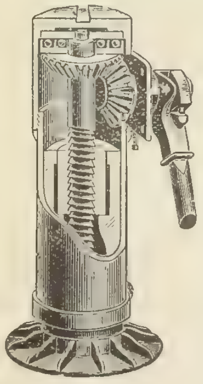
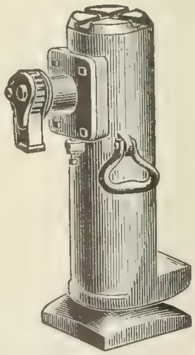
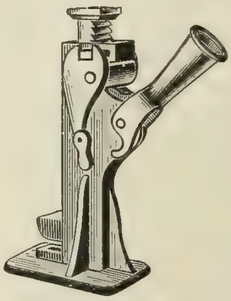


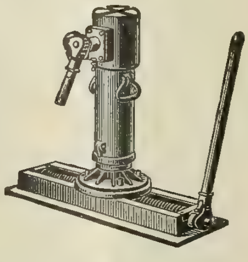
Sectional View



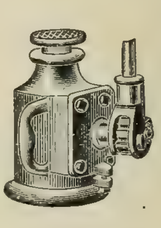
Foot Lift Jack



15 Ton Track Jack



Traversing Jack



Journal Jack

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RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta Central Ry.—A press report states it is likely that construction will be started at an early date upon this projected railway from Red Deer, Alta., westerly to the Rocky Mountains, about 70 miles. At the last session of the Dominion Parliament a subsidy was voted to aid in the construction of this railway. (July, 1903, pg. 232.)

British Columbia.—Application will be made at the next session of the B.C. Legislature for an act to incorporate a company with power to construct and operate a railway of standard gauge, from or near Corbin, on the Eastern British Columbia Ry., southerly, following the east fork of the south fork of Michel Creek to the summit between that creek and a tributary of the Flathead River, thence southerly along the Flathead River, or by the most convenient route to the International boundary, about 40 miles The proposed railway to be operated by steam or electric power, and power will also be sought to construct and operate telegraph and telephone lines, and to own water power, etc. Harvey, McCarter and Macdonald, Cranbrook, B.C., are solicitors for the applicants. In connection with this application it may be mentioned that the Corbin Coal and Coke Co., of Spokane, Wash., was recently licensed under the B.C. laws respecting extra-provincial companies, to exercise its powers in the province, with the exception of those relating to the construction and operation of railways, with J. A. Harvey, of Harvey, McCarter and Macdonald, Cranbrook, B.C., as its attorney. The company has already, under the charter of the Eastern British Columbia Ry., constructed a line from McGillivray station on the C.P.R. Crow's Nest branch, southerly along Michel Creek, to its coal properties there, a distance of 14 miles. The point on the International boundary to which the proposed line will be built will probably be in the neighborhood of Kingsgate-Eastport, where the Spokane International Ry. connects with the C.P.R. D. C. Corbin is President of the Spokane International Ry., the Eastern British Columbia Ry., and the Corbin Coal and Coke Co. (Nov., pg. 787, and Oct., pg. 711.)

Calgary and Knee Hill Ry.—Application will be made next session of the Alberta Legislature for an act authorizing an extension of the time within which the first 30 miles of this projected railway may be constructed until Mar. 15, 1911, and that the time for constructing each of the remaining sections of 30 miles be extended for two years from the date on which, by the act now in force, they have to be completed. Short, Cross & Biggar, Edmonton, Alta., are solicitors for the applicants. (Oct., pg. 711).

Canadian, Liverpool and Western Ry.—Notice is given that application will be made next session of the Dominion Parliament for the incorporation of a company with this title, to construct a railway from the National Transcontinental Ry., near the junction of the Ribbon, Maunan and St. Maurice rivers, Que., northeasterly to the south shore of Lake St. John, thence easterly along the Saguenay River to its mouth; with a branch line from the mouth of the Saguenay southwesterly, following the River St. Lawrence to Quebec; thence along the western or upper shore of the river to Montreal. The company will also apply for power to carry on a general navigation business; to construct and acquire wharves, docks, warehouses, offices and other structures; to acquire and utilize water and steam power for the purpose of compressing air or generating electricity for lighting, heating or motor purposes; to construct and operate telephone and telegraph lines and for other purposes connected therewith. It will also ask that the works to be constructed be declared to be for the general advantage of Canada. Smith & Johnston, Ottawa, are solicitors for the applicants.

Edmonton to Peace River.—A resolution was passed at a meeting of the Athabaska Landing, Alta., Board of Trade, Nov. 16, urging the Dominion and Provincial Governments to aid in the construction of a railway from Edmonton to Athabaska Landing, and thence to Peace River, by means of a guarantee of bonds.

Essex Terminal Ry.—In 1906 track was laid for about two miles from the Pere Marquette Rd., westerly to the C.P.R., at Walkerville, and grading has been done easterly from the Pere Marquette Rd. to the G.T.R., one mile. The intention is to extend the line so as to connect with the Michigan Central Rd. at Windsor, Ont. W. Woollatt, formerly Superintendent of the Lake Erie and Detroit River, is Manager; and O. McKay is Chief Engineer. (May, pg. 329.)

Ingersoll to Embro, Ont.—An Ingersoll paper says: "If Ingersoll is ever to have a railway running through the district to the north of us and connecting with the main line of the C.P.R. at Embro, she will have to build it herself. . . . That northern country is the only country not having good railway connection with Ingersoll. The only way we can get into close connection with the C.P.R. main line is by constructing a straight line to Embro. And the only way we will ever have such a road is to build it ourselves."

The C.P.R. has a branch line from Woodstock to St. Thomas, Ont., passing through Ingersoll, where the Tillsonburg, Lake Erie and Pacific Ry. from Port Burwell also comes in. Embro is a station on the C.P.R. main line between Toronto and Windsor, and is the point from which a line has been constructed under the T., L.E. and P.R. charter, to the town of Embro, about six miles northerly, connecting with the St. Mary's and Western Ontario Ry., which has been completed and is in operation from Embro to St. Mary's. What the Ingersoll people are therefore asking is for the construction of a line to connect their present lines with the C.P.R. main line and the extension of the T., L.E. and P.R. at Embro station.

Intercolonial Ry.—Recent reports state that a considerable amount of bridge and track repairing has been done on the I.C.R. of late. The operations in connection with the construction of the second track between Moncton and Painsec Junction, N.B., are reported to have made considerable progress. The bridges on the section have been reconstructed, so as to enable them to carry the second track, and the roadbed has been made ready for the ties for a considerable portion of the mileage.

On Nov. 10, a large proportion of the men employed at the car repair shops at Moncton were transferred from the temporary premises occupied since the fire to the new shops. (Nov., pg. 793.)

Lake Temiskaming to Satika Lake.—With reference to the reported projected line of railway between these points as mentioned in our Nov. issue, it is probable its construction, if undertaken, will be under the Raven Lake Mining and Development Co.'s charter. The company is incorporated under the Dominion Companies Act, with power to construct a railway.

In the report mentioned, the name of W. H. Rowley, Hull, Que., was given as a member of the company projecting the railway. He advises us that he is in no way connected with the matter, except as a shareholder in the mining company. (Nov., pg. 793.)

The Maritime Coal, Ry. and Power Co. is carrying out a number of improvements at its mining property at Joggins, N.S. A new road is being constructed, and a contract has been let to Rhodes, Curry & Co., Amherst, N.S., for the erection of a number of houses for the men employed at Joggins.

A contract has been let for the sinking of a slope to the new measures which have been discovered. Shortly after the present company took over the mines of the old Joggins Co., the search for the main seam was renewed. This seam had been looked for by the previous owners of the property for many years, but without success. After several attempts the new company recently located the main coal bed about a mile to the westward of the slope now in operation. It is said that the new seam opens up for development millions of tons of coal, and ensures to the company practically an inexhaustible supply. It is expected to have the new slope ready so that coal may be shipped during the season of 1909.

Surveys have been started for the location of a railway from the company's mines at Chignecto, N.S., to Northumberland Strait, 26 miles. The construction of such a line would enable the company to engage in the trade of supplying the Montreal market by water. (Sept., pg. 617.)

Matane and Gaspe Ry.—The charter powers of the company authorize it to operate a line or lines of steamships between Montreal, Quebec, ports on the north shore of the St. Lawrence River, and various places on its main line of railway. In addition to the main line from near St. Flavie, Que., on the Intercolonial Ry., to Gaspe, about 240 miles, the company has power to construct a line from the junction with the Intercolonial Ry. to Rimouski, a branch southwest to a junction with the National Transcontinental Ry. near Glazier Lake, and an extension from Gaspe to Griffin Cove. The section now under construction extends to Matane, and as the line follows the highway for nearly the entire distance, the work of construction is comparatively light. Work is in progress at four different points, and it is expected to have the grading completed within a few months. The second section from Matane to Ste. Anne des Montes, about 60 miles, will be started immediately on the completion of the line to Matane. The work on this section will also be comparatively light. The route will be about a quarter of a mile from the shore. On the remaining portion of the line to Gaspe, 127 miles, the section between Ste. Anne des Montes and Mont Louis, about 38 miles, is all heavy work. It is expected to start the construction of the branch to the National Transcontinental Ry. as soon as the construction of the main line has been completed to Temiscouata Junction near Glazier Lake. The company proposes to use steam as a motive power for hauling its freight trains, and electric cars for its passenger service. (Nov., pg. 793.)

Prince Edward Island Ry.—We are advised that the branch line which it is proposed to construct, to be known as the Elmira Branch, will start from Harmony, a station on the P.E.I.R., about five miles west of Souris. It will run easterly for about 10 miles to Elmira at the eastern end of the province, passing through the districts of Harmony, Baltic and Elmira. The construction of the branch line will enable the agricultural and fishing interests of these districts to secure an outlet for their produce, etc. The construction will be of the usual character, and without any work

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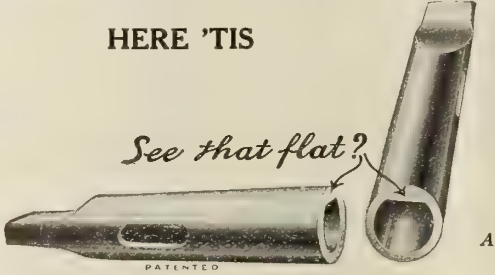

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of exceptional difficulty. Of the total length of the branch 23.6% will be on curves; the maximum curvature being 4°. The maximum gradient is 1.2%. There are several large cuttings on the line, but no bridges. (Nov., pg. 793.)

During his recent visit of inspection to Prince Edward Island, M. J. Butler, Deputy Minister of Railways, said the construction of an up-to-date roundhouse at Charlottetown, larger and better equipped than the present one, is being discussed, but the money for its construction had not been voted.

Quebec Bridge and Ry. Co.—The connection of the company bearing this title with the fallen bridge over the St. Lawrence River, near Quebec, with the connections, and all its franchises, etc., ceases on Dec. 1, when the Dominion Government takes possession. The preparation of plans for the reconstruction of the bridge is in the hands of a commission of engineers, and the bridge is to be built as an integral part of the National Transcontinental Ry. (Nov., pg. 793.)

It is reported that in the reconstruction of the Quebec bridge the commission of engineers appointed by the Dominion Government to carry out the work, will consider the advisability of providing at least 10 ft. more headroom for vessels than existed in the structure which collapsed. The former plans provided for a height of 150 ft. above high water. The masts of the Allan Line s.s. Virginian reach 141 ft. above the water line, and could pass under the floor of a bridge constructed under the old plans, but the C.P.R. Empress steamships have masts of 154 ft., and would be unable to pass except at low water. Shipping interests at Montreal are desirous that the new bridge should be constructed sufficiently high to permit of the free passage, at all stages of the tide, of the largest vessels trading to Canadian ports.

Quebec Terminals.—A sketch plan has been published showing proposed railway terminals and outline of docks at Quebec, between Champlain Market and Pointe à Pizeau. The plan practically provides for the construction of an entirely new series of docks, wharves, etc., by the erection of a line of cribwork extending from the proposed terminus at Champlain Market towards Pointe à Pizeau. The passenger station and yards will be at the Champlain Market end, and will extend along the shore and the reclaimed land between the present shore line and the crib work, to near Cape Diamond, where three basins will be constructed, with wharves, railway yard, etc. It is proposed to fill in the area now covered with water from the east of these basins, right to Pointe à Pizeau, and to utilize the land so reclaimed for freight yards. There will be a number of piers extending out from this yard, the end of the piers extending out to line with the crib work starting from Champlain Market. The basins between these piers are to be dredged to the proper depth for ocean and river craft of all sizes. No estimates have been given as to the probable cost of the work. Whether the plan is an official one or not is not stated.

Salisbury and Harvey Rd.—Application will be made next session of the Dominion Parliament for an act to incorporate a company with this title to take over the property and franchises of the S. and H. R. Co., now existing under a Dominion charter. The charter now applied for declares that the railway now extending from Salisbury to Shepody Bay, N.B., 45 miles, be declared to be a railway for the general advantage of Canada; authorizes the company to operate the line by means of steam, electricity or any other kind of motive power; to construct, equip, maintain and operate in the same manner all branch lines referred to in Chap. 80 of the statutes of 1900. These branch lines are: (1) From Turtle Creek station southerly to Baltimore, in the parish of Hillsborough, Albert Co.; (2) From Baltimore Siding northeasterly to Moncton; (3) From Baltimore Siding southwesterly to near Walter's oil works in the parish of Hillsborough. (July, 1907, pg. 481.)

Temiskaming and Northern Ontario Ry.—The connection between the T. and N.O.R. from North Bay with the right-of-way of the National Trancontinental Ry. at Cochrane, Ont., was expected to be made by the end of Nov. The work of completing the ballasting of the line is in progress. There has been some difficulty at different portions of the line owing to track sinking through muskegs, and the upsetting of a construction train, Oct. 29, at one of these points somewhat delayed the completion of the line. The officials at Haileybury have taken possession of their new quarters. The buildings are 40 by 150 ft., and will be used for the general business of the railway. The old freight sheds will be used for express and baggage rooms, and the present express room will be added to the ladies' waiting room. (Nov., pg. 795.)

A deputation from the Charlton district waited on the Chairman of the Commission Nov. 13, and secured his promise that if the Charlton people could guarantee the Elk Lake trade, a service equal to that on the main line would be put in operation on the new branch to Charlton. At present the Elk Lake district traffic goes to Earlton, 28 miles distant, or 11 miles further than would be the case if Charlton were made the objective point.

Railway Commissioners' Various Orders.

5402. Oct. 15. In the matter of sec. 292 of the Railway Act, whereas, the Board, pursuant to the provisions of section 236 of the Railway Act, 1903, on Nov. 29, 1906, ordered that the report or reports of any person or persons appointed by the Board to inquire into and report upon any accident or casualty occurring on any railway, should be privileged and should only be made public or given out by order of the Board. And, whereas the Board has decided to make a further order pursuant to the powers conferred upon it by sec. 292 of the Railway Act, 3 Edward VII, chap. 58, declaring every accident report or information respecting the same furnished by any railway company under the Railway Act, to be privileged and only to be made public or given out by order of the Board. It is ordered that every report or information furnished to the Board, pursuant to the provisions of the Railway Act, be, and the same is hereby, declared to be privileged, and shall only be made public or given out by order of the Board.

INSPECTION OF ELECTRIC BELLS AT CROSSINGS.

5568. Nov. 3.—In pursuance of the powers conferred upon it by secs. 30, 268, and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf, it is ordered that every electric bell upon the line of any railway company subject to the legislative authority of the Parliament of Canada, installed for the purposes of protection, be inspected every morning by the sectionman in whose division or section such bell is, and tested by placing a wire across the rail, upon each side of the crossing, and that if the bell fails to ring, or rings continuously, a flagman at once be placed at such crossing, whose duty it shall be properly to protect the same until such bell is repaired; and that notice of such non-repair be at once given to the station agent nearest to such bell, whose duty it shall be to report the matter at once to the department having charge of the operation and repair of such bells. That failure to comply with the provisions of this order shall subject the defaulter to a fine of $50, payment of which may be ordered by the Board upon proof of the offence.

OPENING OF LINES FOR TRAFFIC.

The Secretary of the Board issued the following circular Oct. 31: "I am directed by the Board to state that hereafter it will not make any orders authorizing the opening for traffic of any line or lines of railway unless the highway crossings and the fencing have received the approval of the Engineer of the Board."

RAILWAY ACT'S PROVISIONS TO BE COMPLIED WITH.

The Secretary of the Board issued the following circular Oct. 31: "The Board is constantly confronted with perplexing situations arising from railway companies proceeding with works of various kinds without first complying with the provisions of the Railway Act, and then asking for confirmation of what has been done, always alleging, among other things, that large sums of money have been expended, and that withholding confirmation would impose great hardship. The Board feels that it must lay down the rule that in all cases the clauses of the Railway Act must be complied with, and that hereafter ratification need not be expected if railway companies fail to observe the preliminaries that the law requires of them."

Railway Commissioners' Traffic Orders.

5453. Oct. 22.—In the matter of the application of the Winnipeg Board of Trade, The Winnipeg Jobbers' and Shippers' Association, and the Deloraine Board of Trade, under sec. 323 of the Railway Act, for an order disallowing the tariffs of freight rates issued by the Canadian Pacific and the Canadian Northern Railway Companies, in substitution for the "Traders' Tariffs," so-called, declared illegal by the Board as preferential and discriminatory in favor of Winnipeg. Upon the hearing of counsel for applicants and the railway companies, the evidence adduced, and what was alleged, the cities of Regina and Portage la Prairie being represented at the hearing: it is ordered that the said application be dismissed. And it is further ordered that the question of special commodity rates from Winnipeg, also the adoption of a modification of the Ontario "town tariffs" prescribed in order 3258, dated July 6, 1907 (Schedule A), as a basis for special "town tariffs" applicable to the Western Provinces, as suggested at the hearing, be reserved for future consideration.

INTERCHANGE OF TRAFFIC.

5491. Oct. 20.—In the matter of the application of the Windsor, Essex and Lake Shore Rapid Ry. Co., for an order directing the Pere Marquette Rd. Co. to interchange traffic with the applicant company at Kingsville, Ont., upon the hearing of counsel for applicant company, and the consent of the Pere Marquette Rd. Co., it is ordered that the P.M.R. Co. interchange with the applicant company, at Kingsville, all freight traffic in carloads, from points on the P.M.R. destined to points on the applicant company's railway, and from points on the applicant company's railway, destined to points on or via the P.M.R.

* * *

The revenue on account of the consolidated fund from Dominion public works, including railways, for Oct., was $824,127.42, and to Oct. 31, $5,721,534.56. The expenditure on capital account for Oct., on public works, including railways and canals, was $3,599,152.92; and to Oct. 31, $16,097,599.12; and on account of railway subsidies to Oct. 31, $195,290.40.

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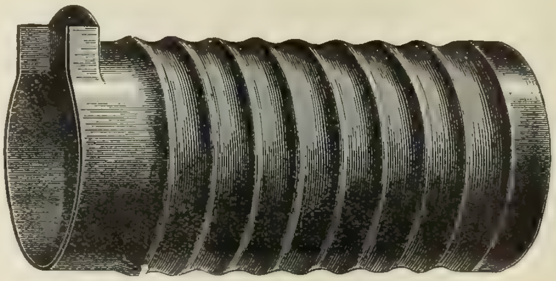

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American Brake Shoe & Fdy. Co.'s Steel Back Brake Shoes for Locomotive, Passenger and Freight equipment, "Made in Canada."
Fewings' Cast Steel Car and Engine Replacers, "Made in Canada."
"Ajax" Passenger Car Diaphragms.
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Monk Bridge Locomotive Staybolt Iron.
McCord & Co.'s Malleable Iron Journal Boxes for Locomotive Tender, Passenger and Freight equipment, "Made in Canada."
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G.T.R. Betterments, Construction, Etc.

The Block System.—In connection with the report that the company was about to instal a block system on the line between Montreal and Chicago, it was officially stated at Montreal Nov. 6 that as yet no move had been made in that direction. While this step is in prospect as a future development there was no intention of undertaking so expensive an improvement at any time in the immediate future. To instal a block system on this route would mean, it is estimated, an initial expenditure of about $1,135,000, and would further involve the permanent employment of about 150 men, which would largely increase the expenses of operation. The line is at present worked on the station to station block system, which means that the stretch between each station constitutes a block, and the track is kept clear for each train that enters a block until it leaves it at the next station. The signalling is done by the station operators.

Electricity in Shops.—A press report states that the company has commenced the electrification of its shops at Point St. Charles, Montreal. The project will necessitate the expenditure of a very large sum, and will extend over a period of years. It was the original intention to go to St. Lambert and use water power to develop the electricity, but it has been found that there is no water power available. It has consequently been decided to make the installation at Point St. Charles, and use coal for the generation of current.

Montreal Terminals.—A recent press dispatch from Montreal stated that the G.T.R. had under consideration an entirely new terminal scheme for Montreal, the carrying out of which would involve the expenditure of some millions of dollars. One feature of the new plans, it was said, would be the construction of an air line from the Victoria Bridge to Bonaventure station, with an appropriate terminal structure there, and another would be the quadrupling of the track from beyond St. Henri, to give a double-track for both passenger and freight traffic from the West. We have been advised that while in times past consideration has been given toward obtaining an air line connection from Victoria Bridge to the Bonaventure station, without going around St. Henri, the company is satisfied that to secure such a line through the heart of Montreal would be too expensive. The report doubtless originated through the construction of the Montreal and Southern Counties Ry., an electric line, which is crossing the Victoria Bridge, and is constructing a line to Youville Square, near the G.T.R. offices. This line is to be operated over the city streets.

Ottawa Station and Hotel.—Engineers were at work during Nov. in the Ottawa yards in connection with the construction of the central station and hotel. Work is expected to be started on several new buildings shortly. A new icehouse, having double the capacity of the old one, is being built near the yards on Bronson Avenue, and material has been ordered for the building of a new freight shed to run along the extension of Little Sussex St. No contract has been let for the erection of the baggage annex, which is to be used as a temporary station during the construction period. The tenders received in response to the first call were not satisfactory, hence the second call.

Kingston, Smith's Falls and Ottawa Ry.—W. Wainwright, Fourth Vice-President G.T.R., stated in Ottawa recently that a direct route from Toronto to Ottawa was the policy of the company, and such a route would necessitate the construction of a line from Kingston to Ottawa. The company has an agreement to take over an existing charter, the holders of which were making efforts to secure the reaffirmation of the bonuses originally granted for its construction. The charter referred to by Mr. Wainwright is that of the K., S.F. and O. Ry. Co.

Toronto Union Station.—Tenders were received, Nov. 30, for the purchase and removal of the brick and stone lying on the Eckhardt property, a portion of the site of the proposed new Union Station.

Toronto Belt Line.—New rails are being laid on that portion of the old Toronto Belt Line Ry. from the Don River to the Don Valley station, that being the portion used by the Canadian Northern Ry. to reach its own tracks from Toronto union station.

London Improvements.—The Mayor of London, Ont., had a conference with E. H. Fitzhugh, Third Vice-President G.T.R., and other officials of the company, Oct. 28, with respect to the improvement of the company's lines in the city. Negotiations have been in progress since 1904, and the Mayor now says that the company is desirous of having an agreement made, as if work at Toronto and Montreal has to be taken up first, it will be 15 or 20 years before the company will be ready to take up improvements at London again. If an agreement can be reached right away, work will be started in the spring and carried through to completion. Chief Engineer Kelly is looking over the whole situation, and as soon as he has acquainted himself with all the circumstances an interview will be arranged with a view to an agreement being reached. The general result of the interview of Oct. 28, the Mayor said, went to show that the original plans for track elevation would be carried out. That would mean subways on all the streets until William St. was reached, where only a footpath subway would be constructed. Adelaide St. would be level, although the tracks would be raised three feet; Egerton St. would have an overhead bridge, and the street railway tracks would be removed from Rectory to Egerton St.

The Mayor states that there is practically no doubt that nothing will be done in the way of arranging for the elevation of tracks, etc., in London this year, and that it is also more than probable that the company's Chief Engineer will not be able to get to the city to make an investigation until early in the new year.

Stratford Station.—At a dinner given to J. P. Mabee, Chief Railway Commissioner, at Stratford, Ont., Nov. 5, J. Pullen, Assistant Freight Traffic Manager G.T.R., stated that a new station would be built there within the next year.

Port Huron Shops.—Plans and specifications have been received at Port Huron, Mich., for the enlargement of the car plant. They provide for the extension of the blacksmith shop and wood mill north across Riverview St., providing an additional 15,000 ft. of floor space. Arrangements are reported completed for the taking over from the U.S. Government of a portion of the land south of the lighthouse for use as a lumber yard and the storage of other material. A press despatch, dated Nov. 14, says it is unofficially announced that cars are to be built at the shops, and that at least 1,000 men will be employed.

Corinth, Ont., Station.—The station at Corinth, Ont., jointly used by the G.T.R. and Wabash Rd., was destroyed by fire Nov. 1 The buildings destroyed included the freight shed and cattle pens. A temporary structure has been erected for use as a station pending the preparation of plans for a reconstruction.

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-08, from July 1, 1908:

	Earnings.	Expenses.	Net Earnings.	Net Increase or Decrease.
July..	$728,500	$ 525,600	$ 202,900	$159,000 –
Aug..	747,400	561,300	186,100	30,400 –
Sept..	901,700	650,600	251,100	42,000 +
Oct...	1,172,700	752,600	420,100	110,200 +
	$3,550,300	$2,490,100	$1,060,200	$37,200 –
Inc....	$900	$38,100	....	....
Dec..	....	....	$37,200	....

Approximate earnings for 3 weeks ended Nov. 21, $779,000, against $682,200 for same period 1907.

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-8, from July 1, 1908:—

	Earnings.	Expenses.	Net Profits.	Net Increase or Decrease.
J'ly	$6,292,880.82	$4,018,307.57	$2,274,573.25	$232,279.41 –
Aug.	6 385,956.69	3,807,057.98	2.578,898.71	8,623.56 +
Sept.	6,391,672.48	4,277,064.71	2,114,607.77	36,745.58 –
	$19,070,509.99	$12,102,430.26	$6,968,079.73	$260,401.43 –
Inc..	....	....	....	....
Dec.	$1,371,394.55	$1,110,993.12	$260,401.43	....

Approximate earnings for Oct., $7,349,000, against $7,036,000 for Oct., 1907; and for 3 weeks ended Nov. 21, $5,015,000, against $4,757,000 for same period 1907.

Duluth, South Shore and Atlantic Ry.—Gross earnings for Sept., $237,717.27; expenses, $167.468 77; net earnings, $70,248.50; other income, $12,805 46; standing charges, $92.893.19; deficit, $9,839.23; against, $302,122.18 gross earnings; $213.187.70 expenses; $88,934.48 net earnings; $92,925.05 standing charges; $6,271,92 surplus for Sept., 1907. Gross earnings for 3 months ended Sept. 30, $686,381.18; expenses, $493.749.88; net earnings, $192,631.30; other income, $38,246,13; standing charges, $278,023.23; deficit, $47.145.80, against, $214,925.00 gross earnings; $665,665.48 expenses; $299,507.74 net earnings; $28,478.96 other income; $285,182.51 standing charges; $42.804.19 surplus for same period 1907. Approximate earnings for Oct., $253.946, against $296.007 for Oct., 1907; and for 2 weeks ended Nov. 14, $113,392, against $121,536 for same period 1907.

Mineral Range Rd.—Gross earnings for Sept., $72,675.12; expenses, $56.931.72; net earnings, $15,743.40; other income, $29.79; standing charges, $13,066 96; surplus, $2,706.23; against, $67,869.95 gross earnings; $54,111.27 expenses; $13,758 68 net earnings; $35.10 other income; $11,817.16 standing charges; $1,976.62 surplus for Sept., 1907. Gross earnings for 3 months ended Sept. 30, $218,882.05; expenses, $173.867.28; net earnings, $45.014.77; other income, $51.68; standing charges, $38,654.19; surplus, $6,412.26; against, $216.503.02 gross earnings; $165.942.55 expenses; $50,560.47 net earnings; $1,478.13 other income; $36.407.84 standing charges; $15,630.76 surplus for same period, 1907. Approximate earnings for Oct., $76.332, against $71.910 for Oct., 1907; and for 2 weeks ended Nov. 14, $29,867, against $30,535 for same period 1907.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Gross earnings for Sept., $1.498.464.87; expenses, $642,878.05; net earnings, $840,560.31; against $1,049.133.65 gross earnings; $648,490.01 expenses; $400.643.64 net earnings for Sept., 1907. Gross earnings for 3 months ended Sept. 30 $3.409.934.12; expenses, $1,776.723.51; net earnings, $1,589,129.77; against $3.165.958.72 gross earnings; $1,990,623.20 expenses; $1.175.335.52 net earnings for same period, 1907. Approximate earnings for Oct., $1,470,124, against $1,346,090 for Oct., 1907, and for 2 weeks ended Nov. 14, $561,720, against $498,990 for same period 1907.

Grand Trunk Ry. Earnings, Expenses, etc.

TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from July 1 to Oct. 31:

	1908.	1907.	Increase.	Decrease.
Grand Trunk	£2,254,035	£2,570,812	....	£316,777
Canada Atlantic	138,389	171,904	....	33.515
G. T. Western	397,803	480,811	....	83,008
D., G. H. & M.	122.475	138,576	....	16,101
Total.....	£2,912,702	£3,362,103		£449.401

Approximate earnings for Oct., $3,819,628, and for 3 weeks ended Nov. 21, $2,542.693, against $4,168,500, and $2,770,108 for similar periods 1907.

During Sept., 23 railway employes were killed and 12 injured in the course of their employment in operation and construction in Canada. Of the fatalities 12 were due to being run over, 3 to derailments, 2 each to falling material, to suffocation by gas and to falls, and one each to a collision and to machinery. Of the non-fatal accidents, 3 each were due to being struck by trains, and to collisions, 2 to falling material, and one each to being run over, to being caught between cars, to machinery and to a derailment.

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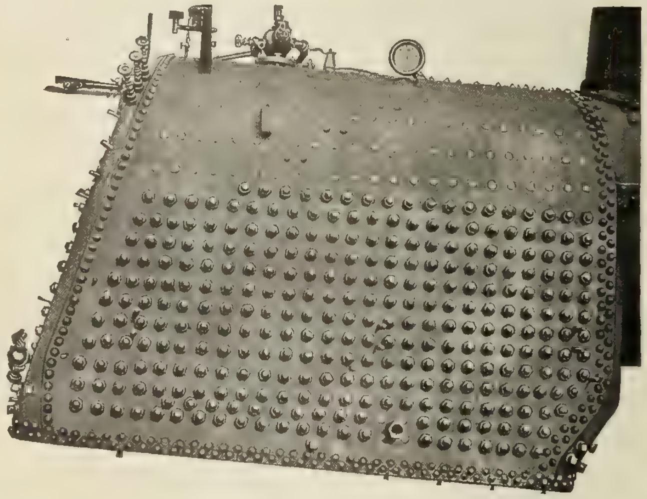

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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

5470 and 5471. Oct. 27.—Authorizing the Bell Telephone Co. to erect wires across C.P.R. at two different places.

5472. Oct. 26.—Authorizing the C.P.R. to construct spur line to the Standard Lumber Co.'s premises, and the Cranbrook Estate, Kootenay district, B.C.

5473. Oct. 26.—Authorizing C.P.R. to construct spur line to McClure & Scott's premises, Balmoral, Man.

5474. Oct. 22.—Authorizing C.P.R. to divert public road between lots 5 and 6, con. 9, Tecumseth tp., Ont.

5475. Oct. 22.—Authorizing C.P.R. to construct spur branch line to the Canadian-America Oil Co.'s premises, Frank, Alta.

5476. Oct. 22.—Authorizing C.P.R. to use bridges on its Atlantic Division at various points.

5477. June 2.—Authorizing Canadian Northern Ontario Ry. to erect telegraph wires across G.T.R. near Gamebridge, Ont.

5478. Oct 13.—Directing the T.H. and B.R. to supply adequate and suitable accommodation for receiving and loading of bricks, etc., at Hamilton, Ont.

5479. Oct. 6.—Dismissing complaint of residents of Barrington, Que., against closing and removing of G.T.R. office at that village to junction of G.T.R. with C.A.R.

5480. Oct. 22.—Approving fire extinguisher for use in G.T.R. passenger coaches.

5481. Oct. 6.—Granting leave to Bell Telephone Co. to erect wires across Schomberg and Aurora Ry. at Schomberg, Ont.

5482. Oct. 27.—Authorizing C.P.R. to open for traffic four portions of its Medicine Hat section; rescinding order 5451, Oct. 20, 1908.

5483. Oct. 28.—Approving C.N.O.R. line between counties of Carleton and Russell, mileage 48.3 to north line of lot 23, con. 2, Gloucester tp., Ont.

5484. Oct. 28.—Authorizing C.P.R. to reconstruct bridge over the Wanapitei River, Cartier section.

5485. Oct. 28.—Authorizing C.P.R. to construct two spur lines across highway at Cardigan, N.B.

5486. Oct. 22.—Authorizing city of Ottawa to lay sewer pipe under G.T.R. at Bayswater Ave.

5487. Oct. 28.—Authorizing the C.P.R. to open for traffic portion of its Pheasant Hills branch from Asquith to Wilkie, Sask.

5488. Oct. 22.—Temporarily approving tariff of telegraph tolls filed by G.T.P. Telegraph Co. in provinces of Manitoba, Saskatchewan and Alberta.

5489. Oct. 28.—Requiring the C.P.R. to stop its trains opposite C.N.R. platform at St. Jerome, Que.

5490. Oct. 28.—Directing C.N.Q.R. to remove from service baggage car 154 in use on its Shawbridge branch.

5491. Oct. 20.—Directing P.M. Rd. to interchange traffic with W.E. and L.S.R. Ry. at Kingsville, Ont. See pg. 867.

5492. Oct. 28.—Authorizing G.T.R. to perform certain work on Sundays. See pg. 853.

5493. Oct. 22.—Temporarily approving Express Classification for Canada, C.R.C. 1, the Tables of Graduated Charges for packages weighing less than 100 lbs., C.R.C. 2, and Money Classification, C.R.C. 3

5494. Oct. 27.—Rescinding order 4578, Dec. 26, 1907, authorizing V.V. and E.R. & N. Co. to take for the diversion of the River Road the additional land required for such purpose, in Delta municipality, B.C.

5495 to 5498. Oct. 28.—Authorizing Manitoba Government Telephone Commission to carry its wires across C.P.R. at four points.

5499. Oct. 22.—Authorizing C.P.R. to construct spur line to Hugh Cummings' premises, tp. 4, range 9, w. 6th mer., B.C.

5500. June 2.—Authorizing C.P.R. to cross by an overhead bridge G.T.P.R. at mileage 457.1, Pheasant Hills branch.

5501. Oct. 28.—Authorizing J. E. Pratte to place telephone wires under G.T.R. tracks at 8th range of Aston, Que.

5502 to 5505. Oct. 28.—Authorizing Manitoba Government Telephone Commission to place wires across C.P.R. at four different points.

5506 and 5507. Oct. 28.—Authorizing Noisy River Telephone Co. to cross G.T.R. in Nottawasaga tp., Ont

5508. Oct. 28.—Authorizing the Claremont and Ashburn Telephone Association to place wires across G.T.R. at Myrtle, Ont.

5509. Oct. 28.—Authorizing Manitoba Government Telephone Commission to place wires across C.P.R. at St. Louis, Man.

5510 to 5512. July 14.—Authorizing Grand Valley Ry. to cross the G.T.R., the T.H. and B. Ry., and the Brantford and Hamilton Ry. at Brantford, Ont.

5513. Oct. 20.—Authorizing Dominion Natural Gas Co. to lay pipe under G.T.R. in Woodhouse tp., Norfolk County, Ont.

5514 and 5515. Oct. 29.—Authorizing Bell Telephone Co. to place wires across G.T.R. at Renton and Terra Cotta stations, Ont.

5516. Oct. 29.—Authorizing C.P.R. to use various bridges on its Mountain and Cascade sections.

5517. Oct. 20.—Dismissing application of the P.M.Rd. for order approving character of work for construction of bridge 52 ft. long over Whitebread tap drain, where it crosses P.M. Rd. land.

5518. Oct. 20.—Dismissing application of Bell Telephone Co. for order directing W.E. and L.S.R. Ry. to bear and pay cost of certain changes of B.T. Co.'s line.

5519 to 5522. Oct. 29.—Authorizing Manitoba Government Telephone Commission to place wires across C.P.R. at four points.

5523. Oct. 29.—Authorizing Bethesda and Stouffville Telephone Co. to place wires across G.T.R. in Whitechurch tp., Ont.

5524. Oct. 22.—Authorizing C.N.R. to open for traffic its railway from Brandon, Man., to Regina, Sask.

5525 and 5526. Oct. 30.—Authorizing B.C. Telephone Co. to place its wires across C.P.R. at Nanaimo, B.C.

5527 to 5535. Oct. 30.—Authorizing Manitoba Government Telephone Commission to place wires across C.N.R. at various points.

5536. Sept. 18.—Authorizing C.P.R. to carry freight over its Moose Jaw branch from mileage 14.5 to 63, provided trains are not run at a greater speed than 13 miles an hour.

5537. Oct. 16.—Authorizing the Manitoba Government Telephone Commission to place its wires across G.T.P.R. at Carberry, Man.

5538 and 5539. Oct. 29.—Authorizing Bell Telephone Co. to place wires across G.T.R. and C.P.R. at Strathmore station, Ont.

5540 to 5545. Oct. 30.—Authorizing Strathcona municipality to place telephone wires across C.N.R. at various points in the municipality.

5546. Oct. 29.—Approving fire extinguisher for use on the C.P.R. in British Columbia.

5547. Nov. 3.—Authorizing C.P.R. to use various bridges on its Ignace section.

5548. Nov. 3.—Approving location of V.V. and E. Ry. from New Westminster district line to the west line of tp. 26, New Westminster district, B.C.

5549. Nov. 3.—Authorizing C.P.R. to operate various bridges on its Kenora section.

5550. Nov. 3.—Authorizing City of Toronto to construct sewer under C.P.R. near Rosedale Creek.

5551. Nov. 3.—Authorizing C.P.R. to construct spur line to Gordon Pulp and Paper Co.'s premises, Rainy River district, Ont.

5552. Oct. 29.—Authorizing Town of Hespeler, Ont., to lay water pipe under G.T.R.

5553. Oct. 29.—Authorizing Peterboro Light and Power Co. to lay gas pipe under G.T.R. at Smith Street, Peterboro, Ont.

5554. Nov. 3.—Authorizing Bell Telephone Co. to place wires across T.H. and B.R. at Trolley St. and Barton St., Hamilton, Ont.

5555. Nov. 3.—Authorizing G.T.P. Telegraph Co. to place wires across C.P.R. at Nokomis, Sask.

5556. Nov. 3.—Authorizing G.T.R. to operate trains over crossing of Toronto Ry., Front St , Toronto.

5557 to 5563. Oct. 30.—Authorizing B.C. Telephone Co. to place wires across C.P.R. at various points on its Cascade section, B.C.

5564. Nov. 3.—Approving Standard Passenger Tariff of O. and N.Y. Ry., C.R.C. 131, covering rates over bridge section of St. Lawrence River bridge, Cornwall, Ont.

5565. Nov. 3.—Authorizing Town of Welland, Ont., to lay sewers under G.T.R. at various points.

5566. July 14.—Authorizing Walkerton and Lucknow Ry. to carry its railway across six streets in Durham, Ont.

5567. Oct. 30.—Authorizing B.C. Telephone Co. to place wires across C.P.R. at Haney, B.C.

5568. Nov. 3.—Ordering daily inspection of electric bells at railway crossings. See pg. 867.

5569. Nov. 3.—Authorizing C.N.O. Ry. to place its tracks across G.T.R. spur line to Edwards' mill, Rockland, Ont.

5570. Nov. 4.—Authorizing C.P.R. to instal drawbridge at Whittier Jct., Man., and to operate its trains over drawbridge and through the junction without being brought to a stop.

5571. Nov. 5.—Amending order of Railway Committee of Privy Council, so as to permit Sherbrooke St. Ry. Co. to move derail from position approved by said order, on the west side of the G.T.R. where Sherbrooke St. Ry. crosses King St., Sherbrooke, to a point 114 ft. 4 in. from said crossing.

5572. Nov. 5.—Authorizing W. J. Curle, Superintendent Brockville, Westport and Northwestern Ry., to prepare and issue tariffs of tolls to be charged for all traffic carried by company.

5573. Nov. 5.—Authorizing G.T.P.R. to use temporarily for construction purposes crossing of C.P.R. tracks at Oak Point Jct., near Winnipeg.

5574 and 5575. Nov. 5.—Authorizing Manitoba Government Telephone Commission to place wires across C.N.R. at Dufresne siding, near Somerset.

5576. Nov. 5.—Authorizing the C.P.R. to construct spur line to Rocky Mountain Cement Co.'s premises, Blairmore, Alta.

5577 and 5578. Nov. 5.—Authorizing Manitoba Government Telephone Commission to place wires across C.P.R. at two points near Minnedosa.

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5579. Nov. 7.—Authorizing City of Ottawa to lay water main under G.T.R. where same crosses Laurel Ave. and Champagne Ave.

5580. Nov. 7.—Authorizing Caledon Telephone Co. to place wires across G.T.R. tracks near Caledon East station, Ont.

5581. Nov. 7.—Authorizing Bell Telephone Co. to cross Central Vermont Ry., Richelieu St., St. John's, Que.

5582. Nov. 10.—Authorizing G.T.P.R. to construct its railway across highways in Saskatchewan, from mileage 60 to 109.52.

5583. Nov. 10.—Ordering that the crossing at Aylmer St., Peterboro, Ont., have watchman at same daily from 6 a.m. to 7 p.m., cost of same to be divided between the C.P.R. and the City of Peterboro.

National Transcontinental Railway.

C. M. Hays, President G.T. Pacific Ry., and Second Vice-President G.T.R., said recently, in Toronto, that any idea of the G.T.R. Co. withdrawing from the arrangement was out of the question and hardly worth consideration. He was more and more convinced of the wisdom of the G.T.R. going into the enterprise, and also more and more confident of the country's future. W. Wainwright, Fourth Vice-President G.T.R., has also emphatically denied the reports published to the effect that on account of the cost of construction of the eastern division of the railway, the G.T. Pacific Ry. Co. will seek legislation at next session of the Dominion Parliament, bettering its condition under the contract. He states that no such thing has ever been thought of.

C. O. Foss, District Engineer, returned to St. John, N.B., Nov. 12, from a trip of inspection over the section of the line under construction between Moncton and McGibney's. There were found to be 4,860 men, 1,203 horses and 12 steam shovels, with other plant in proportion, utilized by the six firms of contractors engaged in the 256.3 miles under his jurisdiction. The contractors have made good progress, the estimate as to the work done being as follows: Moncton to within six miles of Chipman, 50 miles, Corbett and Floesch Co., 44% completed. From the last named point to eight miles beyond Chipman, 14 miles, J. W. McManus Co., 29% completed. From the last named point to the crossing of the old Canada Eastern Ry., at a point 34 miles from Fredericton, 39.3 miles, Toronto Construction Co., 22% completed. From the last mentioned point to Plaster Rock, 66.3 miles, Toronto Construction Co., 7% completed. From Plaster Rock to Grand Falls, 31.9 miles, Willard Kitchen Co., 27% completed. From Grand Falls to the Quebec boundary about 25 miles west of Edmundston, 60.8 miles, Lyons and White, 52% completed. The first four of these contractors are working under the general contractors of the G.T. Pacific Ry., the other two having taken their contracts directly from the Transcontinental Ry. Commissioners. The work in progress covers grading, grubbing, etc., but does not include the construction of steel bridges, or the rails, both of which are supplied by the Commissioners.

At the Moncton end the roadbed has been all completed ready for the rails, and at the end of Oct., 10 miles of track had been laid. The construction of the telegraph line is in progress and it was expected that by Dec. 1, it would be ready for operation between Moncton and Canaan River. The bridge work on several sections of the first 50 miles was also reported to be making satisfactory progress.

S. R. Poulin, District Engineer at Winnipeg, on his return from a trip of inspection easterly to Superior Junction, Nov. 4, reported that track had been laid to about 12 miles beyond Rennie. Work, however, was being concentrated on ballasting the track already laid. It was expected to resume tracklaying in a short time after he left, and to be able to lay the steel as far as the crossing of the Winnipeg River by Christmas. The grading of the whole distance to Superior Jct., to meet the branch to Fort William, under construction by the G.T. Pacific Ry., is expected to be completed by April, 1909.

GRAND TRUNK PACIFIC RY.

C. M. Hays, President G.T.P.R., on his return to Montreal, Oct. 30, from a trip of inspection as far as Prince Rupert, B.C., said he felt quite safe in declaring that he did not apprehend any conditions would arise—engineering, financial or otherwise—that would prevent the line from being completed from end to end by Dec., 1911. Regular trains would be running next spring from Fort William to Edmonton. Within a short time contracts would be let for another 100 miles easterly from the coast section of 110 miles, and for 200 miles further westerly from Wolf Creek, B.C., leaving a gap of 400 miles yet to be placed under contract. Prince Rupert had perhaps the finest dock on the Pacific coast, and while in British Columbia, he had concluded arrangements with the Provincial Government for the spending of $200,000 at the terminus.

On the line between Winnipeg and Edmonton, it was expected that the bridge over the Battle River would be completed Nov. 15, which would enable tracklaying to be resumed towards the crossing of the Saskatchewan River at Clover Bar. The laying of about another 100 miles of track will make a connection with the track laid easterly from Edmonton. At various points on the line to Battle River, works of betterment are in progress, station buildings, etc., are being put up, sidings laid down, etc. A contract has been let for the erection of a station at Wainwright, a divisional point, and ten smaller stations are to be built at intervening points.

Westerly from Edmonton the cold, rough weather has affected the progress of the work, and large numbers of men have been laid off. It was hoped that the weather would have remained sufficiently open to enable the grading to have been completed as far as the Pembina River before the close of the year, but this is now hardly to be expected.

In connection with the surveys through British Columbia, the parties working north and south met near Buckley Summit, about 70 miles north of Fraser Lake, Nov. 6.

On the contract easterly from the Pacific coast, J. W. Stewart stated in Vancouver, Nov. 10, that it was expected to be able to work all winter. There were about 2,500 men at work, but his firm would like to be able to get twice that number to go out to the job. Arrangements were being made for sending in four steam shovels for the work in the vicinity of Inverness. At this point there is some difficulty in deciding finally on the route. The original survey follows the eastern side of Porpoise harbor and through Kane and Port Edward townsites, while an alternative route across Porpoise Island is being considered. The adoption of this route would involve the construction of a swing bridge, estimated to cost $1,000,000, over Porpoise channel. Even with the cost of this bridge the contractors state that the work can be done at less expense, and a better roadbed can be provided than by following the original survey.

A report from Edmonton, Alta., states that A. A. Parker, of Minneapolis, Minn., who arrived there from the Pine Pass country, Nov. 5, had completed a reconnaissance survey from Port Essington and Hazelmere to Edmonton, in the G.T.P.R. interests. Mr. Parker, in general terms, said the Pine Pass was suitable for the construction of a railway, and that the country through which such a line would run was a valuable one.

G.T. PACIFIC RY. BRANCH LINES.

At a meeting of the St. John, N.B., city council, Nov. 2, a letter was read from F. W. Morse, Vice-President G.T.P.R., asking the city to submit a proposition as to what would be done to assist the company to enter St. John, and what conveyance of property for terminals at Courtenay Bay would be made. It is generally thought that the railway will be able to enter the city and reach Courtenay Bay by the same route as the Intercolonial Ry., from either Moncton or Norton, by arrangement with the Dominion Government, in which case access to Courtenay Bay could be arranged for as well. The principal difficulty is as to arranging for room for sidings and yards. Although willing to do all that is possible to assist the railway entering the city and establishing terminals, there appears to be some unwillingness on the part of the city council in giving up its rights. The whole question is being considered by the council's board of public works.

The line under construction from Fort William to Superior Junction, Ont., was expected to be completed, so far as tracklaying was concerned, by Nov. 15. This was the report made by Division Engineer Knowlton, Nov. 3. At the end of Oct. the track had been laid to within six miles of the point of junction with the main line easterly from Winnipeg, and in that six miles there were two large wooden trestles to complete. The ballasting of the branch is well in hand, and the other work of completing the line for operation is forward. It was announced Nov. 27, that the line was open for traffic.

Government Railways for Alberta.

An Edmonton dispatch of Nov. 24 says: Premier Rutherford to-day announced an advanced railway policy throughout all parts of the province, and that will open up the northern country. A department of railways is to be established in charge of himself. He has asked the Dominion Government to guarantee the bonds, but if Ottawa will not help "we will do it ourselves," he said. "I have now decided upon a policy of railway extension throughout all parts of the province. There are districts in Alberta where such extension is absolutely necessary to meet the increasing demands for transportation facilities, as well as to ensure a wholesome competition with existing lines. Then there is the opening of the north country, whose resources in agricultural possibilities are even now attracting the most profound attention in Europe and the eastern half of America. We will see to it that that country receives its share of attention. In the past two years in the south country the problem of grain and coal transportation has quite outgrown the facilities. If we do not soon build more railways in Alberta settlers will cease to come into the country in the numbers we require. To get homesteads to-day they have to go 40 to 60 miles from the railway, and that is much farther than the twentieth century settler is willing to go.

I. W. Gautt, Manager Lackawanna-Grand Trunk Line, gives notice that his office has been removed from 355 Dearborn St., Chicago, Ill., to Nasby Bldg., Toledo, Ohio.

J. Battle, T. Conlon and J. H. Armstrong, contractors for the construction of portions of the recently opened C.P.R. Toronto-Sudbury line, obtained permission at Osgoode Hall, Toronto, to amend their claim against the C.P.R., whereby they contend that they are entitled to be paid the same price for 12½ miles of construction work as was paid to other contractors, and alleging misrepresentation against the company.

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Railway Finance, Meetings, etc.

Alberta Ry. and Irrigation Co.—Approximate net profits, exclusive of land sales for Sept., $35,468, against $24,414 for Sept., 1907. Approximate railway receipts for Oct., $31,052, against $26,802 for Oct., 1907. Approximate net profits, exclusive of land sales for Oct., $31,000, against $37,335 for Oct., 1907. Total net profits for 4 months ended Oct. 31, $127,024.

We are advised that while the C.P.R. has acquired a controlling interest in the stock of this company, it will be continued as a separate corporation with its present officers.

Burlington and Nelson Ry.—See Kaslo and Slocan Ry.

Burk's Falls and French River Ry.—The annual meeting was held at Burk's Falls, Ont., Nov. 3. Following are the officers and directors for the current year: President, R. J. Watson, Burk's Falls; Vice-President, V. Ratz, Park Hill; Secretary-Treasurer, H. W. Cooper, Montreal; Solicitor, D. R. McLean, Burk's Falls; other directors, A. A. Agar and W. J. Ard.

Canada Atlantic Ry.—Following are the officers and directors for the current year: President, C. M. Hays; Vice-President, E. H. Fitzhugh; Secretary-Treasurer, F. Scott; other directors: W. H. Biggar, J. W. Loud, W. Wainwright, and R. S. Logan; General Auditor, W. H. Ardley.

Canadian Northern Ry.—The story telegraphed from Brockville, Ont., that the C.N.R. had made an arrangement with the G.T.R., to take over from it the control of the Canada Atlantic Ry., is officially denied. This line extends from Depot Harbor, via Ottawa, to a connection with the G.T.R. and other lines in Vermont. It is by this line that the G.T.R. secures an entrance into Ottawa, and gave the controlling voice in the erection of the new central station there. The acquiring of the line by the C.N.R. would give it at once a connection between its Toronto-Sudbury line, and its Quebec lines, which are now being connected with Ottawa by a line from Hawkesbury. Financially the C.A. Ry. has shown a loss since ever the G.T.R. took hold of it.

Central Ontario Ry.—A special general meeting of shareholders has been called to be held at Trenton, Ont., Dec. 7, for the purpose of authorizing the directors to issue bonds to the amount of £250,000, or such other amount as may be authorized to retire the outstanding bond issue and for other purposes of the railway.

Dominion Atlantic Ry.—Gross earnings for Sept., $176,900, against $182,571 for Sept., 1907. Total gross earnings for 9 months ended Sept. 30, $940,800, against $975,499 for same period 1907.

Duluth, Rainy Lake and Winnipeg Ry.—D. D. Mann, Vice-President Canadian Northern Ry., stated Nov. 20, that the report that the C.N.R. was about to pay $16,000,000 for this line was ridiculous. "We have had an option on the line for a year," said Mr. Mann, "and we run our trains over it now. But there are only about $2,000,000 in stock invested in the road and about the same amount in bonds. Our option expires in a month or two, but I cannot say whether or not we will take it up."

The D., R.L. and W.R. extends from Virginia, Minn., the terminus of the Duluth, Missabie and Northern Ry., 77.8 miles from Duluth, and extends to Ranier, at the point where the Rainy River leaves Rainy Lake, 90.9 miles. Here it connects with a bridge over the Rainy River, jointly owned with the Canadian Northern Ry. Through trains are operated over the line into Winnipeg, the service being given over the lines of the Duluth, Missabie and Northern Ry., the D., R.L. and W.R., and the Canadian Northern Ry. The D., R.L. and W.R. was constructed by the Cook and O'Brien interests, which controlled large areas of forest lands to be developed. Latterly there has been an amalgamation between the Cook and O'Brien interests and the Henes and Weyerhauser lumber interests. The two firms control, it is estimated, about two billion feet of lumber. The amalgamated concern, it is reported, will erect a large lumber mill at Fort Frances, Ont.

Guelph Junction Ry.—The receipts for the quarter ended June 30, show that the proportion payable to the city of Guelph, Ont., is $5,741.74, against $5,142.14 for the corresponding three months of 1907.

Kaslo and Lardo-Duncan Ry.—See Kaslo and Slocan Ry.

Kaslo and Slocan Ry.—Following are the officers, who are also directors, for the current year: President, E. L. Brown; Vice-President, A. H. MacNeill; Secretary-Treasurer and Auditor, W. H. Fortier; Manager, R. C. Morgan; Superintendent, P. H. Walsh. These are also directors and officers of the same standing of the Burlington and Nelson Ry., and the Kaslo and Lardo-Duncan Ry.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—With reference to the offering of $700,000 of 7% preferred stock, being made in London, Eng., as mentioned in our last issue, we are advised that it is evidently a balance from a previous issue remaining in the hands of the brokers concerned, and is not, either in whole or in part, connected with a new issue by the company.

Quebec and Lake St. John Ry.—Gross receipts for Sept., $67,639.94, against $65,603.63 for Sept., 1907. Total receipts for 9 months ended Sept. 30, $465,497.48, against $471,219.73 for same period 1907. The mileage operated during Sept. was 285.5, against 240 in Sept., 1907.

Quebec Central Ry.—Gross earnings for Sept., $94,664.19; expenses, $62,776.67; net earnings, $31,887.52; against $100,046.93 gross earnings; $62,680.01 expenses; $37,366.92 net earnings for Sept., 1907. Total earnings for 3 months ended Sept. 30, $335,525.19; expenses, $214,091.23; net earnings, $121,433.96; against $324,022.02 gross earnings; $200,635.48 expenses; $123,386.54 net earnings for same period 1907.

Salisbury and Harvey Rd.—At the next session of the Dominion Parliament, application will be made for the passing of an act incorporating a company with this title, for the purpose of acquiring and taking over all the old property rights and franchises of the Salisbury and Harvey Ry. The existing company was incorporated by chap. 100 of the acts of the Dominion Parliament of 1891, and amended by chap 80 of the acts of 1900. The railway constructed by the existing company extends from Salisbury, in the county of Westmoreland, and to or near Shepody Bay or river in Albert county, 45 miles, with 5 miles of spur or branch lines. The Albert Southern Ry. and Harvey Branch Ry., together 19 miles in extent, extend from Alma to Harvey, connecting with the S. and H.R., but trains have not been operated over them for some years. The S. and H.R. has outstanding $150,000 of common stock. It received $29,665.45 by way of bonus from the Dominion Government, of which $14,665.45 was the value of used iron rails; $155,000 from the New Brunswick Government, and $70,000 from municipalities.

Temiscouata Ry.—Total traffic receipts for Oct., $21,812.35. Aggregate receipts for 10 months ended Oct. 31, $192,286.04.

Temiskaming and Northern Ontario Ry.—Gross earnings for Sept., $87,712.42; expenses, $53,867.20, net earnings, $33,845.22; ore royalties, $2,195.96; total net receipts, $36,041.18. Approximate gross receipts for Oct., $97,678.31.

White Pass and Yukon Ry.—Gross earnings for Sept., $223,000. Total for 3 months ended Sept. 30, $709,051.

Railway Rolling Stock Notes.

The G.T.R. has ordered 1,000 steel hopper coal cars in the U.S.

The C.N.R. between Oct. 15 and Nov. 15 received 3 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.

The Canada Foundry Co., Toronto, between Oct. 14 and Nov. 23, delivered 4 eight-wheeled locomotives to the G.T. Pacific Ry. A description of these has already appeared in our columns.

The Montreal Locomotive Works has recently delivered one locomotive to the Johns-Manville Co., for use on its short line between Asbestos and Danville, Que. Details were given in our Aug. issue.

The G.T. Pacific Ry. between Oct. 15 and Nov. 19 received the following additions to rolling stock: 2 baggage and second-class smoker cars, nos. 904 and 905; 6 mail and express cars, nos. 100 to 105; 295 box cars, nos. 305, 284 to 305, 299 and 307, 146 to 307, 424; and 4 locomotives, nos. 97 to 100.

The Intercolonial Ry. between Oct. 16 and Nov. 16 received the following additions to rolling stock: 2 auxiliary cars and one milk car from its Moncton shops; 20 box cars, 60,000 lbs. capacity, from the Canada Car Co., Montreal, and one switching locomotive from the Canadian Locomotive Co., Kingston, Ont.

The Preston Car and Coach Co. is rebuilding 4 first-class coaches and equipping them with the Safety Car Heating and Lighting Co.'s superheater and Pintsch gas, for the Temiskaming and Northern Ontario Ry. It has also recently delivered a carload each of platform trucks and sleighs to the Dominion Express Co.

The C.P.R. between Oct. 13 and Nov. 19 received the following additions to rolling stock: 1 sleeping car, 6 dining cars, 2 colonist cars, 6 straight mail cars, 1 baggage and mail car, 1 mail and express car, 216 box cars, 137 flat cars, and 2 flangers, from its Angus, Montreal, shops; and 15 locomotives from the Montreal Locomotive Works.

The G.T. Pacific Ry. between Oct. 15 and Nov. 19 ordered the following rolling stock: 2,200 box cars, 100 stock cars, 50 refrigerator cars, and 50 cabooses, from the Canada Car Co., Montreal; 500 box cars from Rhodes, Curry & Co., Amherst, N.S., and 25 mogul locomotives from the Canadian Locomotive Co., Kingston, Ont., particulars of which are given on page 879.

The C.N.R. between Oct. 15 and Nov. 15 placed orders for 20 cabooses with the Crossen Car Mfg. Co., Cobourg, Ont., and 6 baggage cars with Rhodes, Curry & Co., Amherst, N.S. Since the date mentioned, the company has also ordered 1,000 box cars from Rhodes, Curry & Co., and 750 box cars from the Canada Car Co., Montreal, all of 60,000 lbs. capacity. Delivery to commence May 1, and be completed Aug., 1909.

By a fire which occurred at Rhodes, Curry & Co.'s car building shops at Amherst, N.S., Nov. 24, 4 colonist cars and 12 baggage cars, under construction for the Intercolonial Ry., and the G.T. Pacific Ry., respectively, were destroyed, in addition to a large quantity of car building material and equipment. The shops are reported to be destroyed, the damage being estimated at about $150,000, which is said to be only partially covered by insurance.

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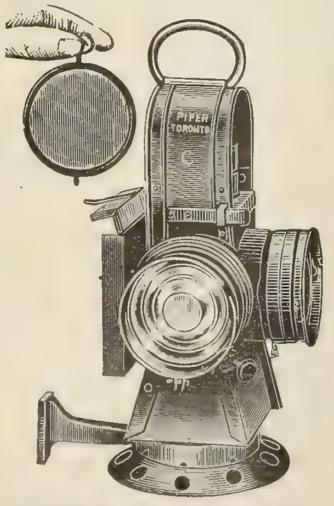

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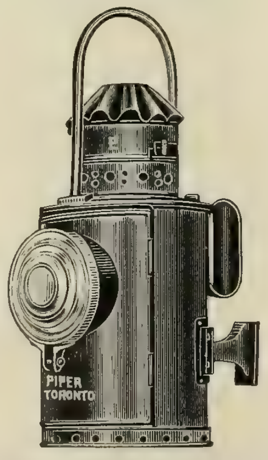

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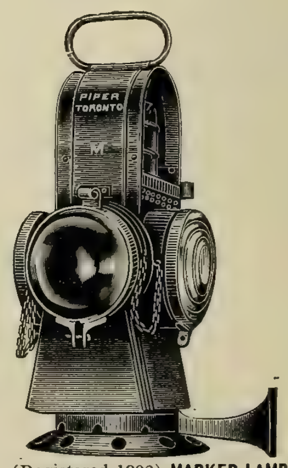

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RAILWAY LAMPS ETC

Following are some particulars of the 500 steel frame box cars which the C.P.R. has ordered from the Dominion Car and Foundry Co., Montreal, as mentioned in our last issue.

Length, inside	36 ft.
Width, inside	8 ft. 6 in.
Height, inside	8 ft. 0 in.
Couplers	Simplex
Truck bolsters	Simplex
Brake beams	Simplex
Side bearings	Susemihl Frictionless
Journals	5 in. by 9 in.
Journal boxes	McCord
Wheels	cast iron, C.P.R. standard

The Temiskaming and Northern Ontario Ry. recently received 50 steel underframe box cars. Following are chief dimensions:

Length, inside	36 ft. 0 in.
Width, inside	8 ft. 6 in.
Height, inside	8 ft. 0 in.
Length, outside	36 ft. 11½ in.
Width at eaves	9 ft. 10⅜ in.
Height to eaves	12 ft. 0 in.
Height to top of running board	12 ft. 6 11/16 in.
Side doors	7 ft. 7¾ in. by 6 ft. 0 in. wide
End doors	2 ft. 5¼ in. by 2 ft. 0 in. wide
Capacity	2,448 c. ft , 80,000 lbs.
Numbers (even nos.)	80,000 to 80,098

The C.P.R. between Oct. 13 and Nov. 19 ordered the following rolling stock: 13 dining cars, 15 second-class cars, 10 first-class cars, 10 coaches (half ordinary passenger, half smoker), 6 baggage and smoking cars, 20 baggage and express cars, 10 mail and express cars, 22 first-class observation cars, 6 sleeping cars, 651 box cars, 29 flat cars, 11 stock cars, 4 steel coal cars, 1 snowplow, 10 consolidation locomotives, and 1 articulated compound locomotive, at its Angus, Montreal, shops; and 9 vans at its Farnham, Que., shops.

The G.T. Pacific Ry. has ordered from the Canadian Locomotive Co., Kingston, Ont., 25 mogul locomotives, for delivery on or before July 1, 1909. Following are chief dimensions, etc.:

Total weight on drivers	138,176 lbs.
Total weight, engine, loaded	161,976 lbs.
Total weight, tender, loaded	143,300 lbs.
Total weight, engine and tender	305,276 lbs.
Total wheel base of engine	24 ft. 3 in.
Total wheel base of tender	19 ft. 3½ in.
Total wheel base of engine and tender	53 ft. 10 in.
Total length of engine and tender	64 ft. 11½ in.
Cylinders	20 by 26 in.
Driving wheels, diar.	63 in.
Working pressure	200 lbs.
Capacity—water	7,000 U.S. galls.
Capacity—coal	20,000 lbs.

Canadian Northern Ry. Construction, Etc.

Canadian Northern Quebec Ry.—It was announced in Montreal Nov. 11 that the company expects to have its new line between Garneau Jct. and Quebec ready for operation in the spring. The contractors have been pushing the work at a rapid pace, and very little now remains to be done before the track can be declared ready for traffic. This will give the company a shorter and more direct route between Montreal and Quebec than the one it has hitherto used via Rivière à Pierre and thence over the Quebec and Lake St. John Ry.

Canadian Northern Ontario Ry.—The work of making the rock cuts on the section of the company's line to Ottawa has been completed from St. Joseph's into the city. The grading has been completed to the west side of Green's Creek, and is ready for the rails. This line extends from Ottawa to Hawkesbury, Ont., where connection is made with the C.N. Quebec Ry. to Montreal and Quebec. With respect to the entrance into Ottawa, the final arrangements have not yet been completed with the city council, and no further construction work will be undertaken until this has been settled. Amended plans have been filed for the location of the line from the boundary between Russell and Carleton counties, 48.27 miles from Hawkesbury, to Hurdman's bridge, 57 miles from the same point. The route lies between the Montreal road and the Ottawa River for a considerable distance, and then crosses to the south of the road. At Besserer's grove it passes through J. O'Connor's farms, and then closer to the city through the Grey Nun's property at Cyrville village, then to Hurdman's bridge, crossing the C.P.R. and the Rideau River to J. Thompson's property. The plan shows a strip of land 100 ft. wide. The company expects to have the line fully completed for operation in the spring.

Canadian Northern Ry.—D. D. Mann, Vice-President, who arrived in Winnipeg, Nov. 12, from Edmonton, Alta., having completed an inspection of the company's lines, said in an interview that excellent progress was being made with the new lines, and added it was possible that in some cases grading would be continued during the whole winter. With regard to work for 1909, he said it had been decided that large sums would be expended in improving the line from Winnipeg to Lake Superior. Heavier steel would be laid; heavy bridges would be put in, and the line made equal in all respects to any trunk line on the continent. Faster and much heavier trains could then be carried, and the general service would be very much improved. This expenditure would be made solely for the reason that the demands of business required it.

In reference to the general policy of the company in the West, Mr. Mann said: "Our policy as to railroading in the West has been criticized, but we have found that it is of undoubted advantage in the settlement of a new country that the introduction of what might be called the pioneering system of railroading, the quick construction and the utilization of light rails, meet the immediate demands of districts, encourages settlement and creates a market, and then when the situation demands its grades may be improved and the weight of the rails increased in response to the necessities of the traffic. That policy has been followed on the C.N.R., and we are now engaged in carrying out the second instalment of that policy on our lines. The roadbed between Winnipeg and Port Arthur is being perfected and the best grade of heavy rails laid. The pioneering system, you can see, has its decided advantages, as it creates a market, settles the direction of highways and builds up towns and villages. Then follows in natural sequence the perfectly equipped road and other lines are at the back door. When a road is thus built, the fixed charges are less, allowing more percentage to the stockholders."

C. W. Cooper, Assistant General Passenger Agent, is reported to have said, Nov. 2, the company has constructed more than 350 miles of road this season. There are more than 3,000 miles of extensions surveyed, and on some of these construction will be proceeded with next year.

The company's new line into Regina, Sask., was opened for traffic Nov. 5. A tri-weekly service is being operated from Brandon, Man., to Regina, 225 miles.

Steel had been laid on Nov. 12 as far as Thunder Creek, on the Thunderhill branch, a distance of 11 miles from Thunderhill Junction. At this point a bridge 850 ft. long, and 85 ft. high, is being erected. It will take about a month to complete the bridge, and it is expected to resume tracklaying shortly after the bridge is finished. There is steel enough on hand to lay an additional 15 miles of track, and it is understood that the company hopes to be able to complete the line to the provincial boundary this year.

The company's tracklaying gang started out Nov. 11 for the line under construction to Hudson Bay, on which track has already been laid to Pas Mission. It is hoped to be able to lay an additional 25 miles of track this season.

It was reported early in Nov. that 60 miles of track had been laid on the Goose Lake branch, and that the grading had been completed for a further distance of 20 miles. It is hoped to get track completed on this distance during the present season, and to have a further distance of 20 miles graded by the end of the year.

M. H. McLeod, General Manager, went over the line Nov. 2, and it was subsequently reported that grading had been abandoned for the winter, owing to the frost. D. C. Campbell, of the construction department, stated that 30 miles of the branch was ready for service, the tracklaying gang had the steel laid for about 60 miles, and would continue at work through the winter. The surfacing gang would resume work in the spring. While in Saskatoon, Mr. McLeod looked into the condition of the station and yards. He said plans for the new station had been completed, and everything would be in readiness for calling for tenders in the spring. There would also have to be some rearrangement of the yards, so as to give better facilities for handling trains.

The freight offices and sheds which the company is erecting at Saskatoon, Sask., are expected to be completed by Dec. 31. The situation of the buildings is between Twentieth and Twenty-first Sts., facing on First Ave. As shown by the plans the sheds will be 240 ft. long by 40 ft. wide. On the street side there will be a team approach, while on the other side will be the tracks. The structures are to be of frame, metal clad, with hardwood floors. A special room will be provided for bonded freight. The existing station will be remodelled as soon as the freight officials are transferred to the new buildings, and will be utilized until the work of erecting a complete new structure is undertaken, which it is hoped will be arranged for by the end of 1909.

Railways and the Lord's Day Act.—The annual report of the Lord's Day Alliance of Ontario for 1907-08 expresses satisfaction with the manner in which the existing legislation is enforced. The only real complaint that the organization has to make is in regard to the operation of electric railways on Sundays. The report says there seemed to be an increasing tendency on the part of electric railways to operate their cars on Sundays. The Alliance had not had much success in putting a stop to the practice. The recent decision of the Ontario Railway and Municipal Board in the Port Arthur Sunday car case, which for the present prevents the Province from prosecuting the town for a violation of the law, has created a new situation, and since its deliverance several companies have started Sunday operation. The enforcement of the law against steam railways has been accompanied with great difficulty owing to persistent endeavors of the companies to be exempted from the general law by special legislation.

Judgment has been delivered in the Supreme Court, dismissing the appeal of the Great Northern Ry. of Canada against the decision of the lower court, in its case against the Furness-Withy Steamship Line, and maintaining the cross appeal of the latter company, as to the construction of a contract between the two companies respecting the running of a line of steamships between Quebec and Manchester, Eng., during the navigation seasons of 1902 and 1903, and the supplying of cargoes for them. By the appeal the amount payable by the G.N.R. of Canada was increased from $1,708 to $3,992.

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READ "REACTIONS"

Third Quarter Just Out

THE Quarterly Publication "REACTIONS" will be mailed free of charge to anybody in the United States, Canada or Mexico. The Third Quarter of this paper contains a number of very interesting articles and is profusely illustrated. Subjects treated of are the following: Welding Locomotive Frames and Driving Wheel Spokes, A New Development in Rail Welding, New Thermit Reactions, Welding Two Large Anchors, Quick Repair to a Rudder Frame, Welding Propeller Strut of German Warship, Hard Spots in Steel Castings and Improving Cast Iron.

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MAINLY ABOUT PEOPLE.

Sir Thos. Shaughnessy has given $6,000 to the Students' Home of Laval University, Montreal.

D. McNicoll, Vice-President C.P.R., left Montreal Nov. 16 on a tour of inspection of the company's Atlantic Division.

D'Arcy Scott, who was recently appointed Assistant Chief Railway Commissioner, has resigned his position as Mayor of Ottawa.

The engagement is announced of Miss M. Angus, daughter of R. B. Angus, director C.P.R., to Dr. H. W. Chipman, of Montreal.

J. D. Oppe, formerly General Manager Marconi Wireless Telegraph Co. of Canada, returned to Canada, recently, from Great Britain.

C. R. Hosmer, director C.P.R., presided at a dinner at the Mount Royal Club, Montreal, Nov. 1, at which Viscount Milner was the principal guest.

F. H. Wilson, formerly locomotive foreman G.T. Pacific Ry. at Melville, Sask., has entered the Canadian Northern Ry.'s employ as a machinist.

A. H. Collinson, Chief Engineer of the Shanghai and Nankin Ry., was in Montreal, Oct. 30, on his way to Great Britain to spend a short vacation.

J. McKee, at one time in the I.C.R. service, and since 1875 in the employ of the Prince Edward Island Ry., died at Charlottetown, P.E.I., Oct. 30, aged 62.

The Canadian Railway Club's scholarship in McGill University, Montreal, has been won by Bruce Robb, son of W. D. Robb, Superintendent of Motive Power G.T.R.

Sir William Van Horne left Montreal recently to pay a visit to his model farm at Selkirk, Man., after which he intended making a tour of C.P.R. western lines.

F. C. Salter, European Traffic Manager, G.T.R., returned to Liverpool, Eng., recently, after an extensive trip through the European Continent in the interests of the G.T.R.

L. O. Armstrong, C.P.R. Industrial Agent, and H. R. Charlton, G.T.R. Advertising Agent, attended the annual dinner of the Canadian Camp Club at New York, Nov. 13.

Lord Strathcona, who is president of the Royal Caledonia Curling Club of Scotland, has subscribed $1,000 towards the expense of sending a Canadian curling team to Scotland.

The engagement is announced of Miss P. E. Kingsmill, sister of Rear-Admiral Kingsmill, Commander of the Canadian cruiser fleet, to Capt. J. M. Young, of Darjeeling, India.

Dr. J. W. Fletcher, who died in Montreal, Nov. 8, was a son-in-law of Collingwood Schreiber, C.M.G., Consulting Engineer of the Dominion Department of Railways and Canals.

Mrs. Robt. Kerr, wife of the Passenger Traffic Manager C.P.R., returned to Canada by the C.P.R. Empress of Britain Nov. 19, after having spent some time in Great Britain.

Col. Sir Henry M. Pellatt, a director of various transportation and industrial companies left Toronto Nov. 3, and sailed from New York on the following day for Great Britain.

H. M. Clark was sentenced to imprisonment in London, Eng., recently, for obtaining money by false pretence. He used cards bearing the name of E. B. Osler, one of the C.P.R. directors.

J. R. Nelson, Superintendent district 2, Ontario Division, C.P.R., was acting as General Superintendent Ontario Division, recently, during the absence of J. Oborne on his wedding trip.

C. M. Hays, President G.T. Pacific Ry., has sent $50 to Mrs. O'Rourke, wife of a train dispatcher, in commemoration of the birth of the first child born in Melville, Sask., to a G.T.P.R. employe.

Lord Northcote, who recently returned to England, via Canada, from Australia, where he has completed his term as Governor-General of the Commonwealth, is a son in-law of Lord Mount Stephen.

Lord Mount Stephen has contributed securities to the amount of $73,000 to the presentation fund for the pastor of St. Paul's Presbyterian Church, Montreal, with which he was at one time associated.

F. Wilson, formerly Locomotive Foreman G.T.P. shops, Melville, Sask., was presented with a diamond ring by the employes there, recently, on his leaving for Winnipeg to take service with the C.N.R.

T. E. Kenny, President of the Royal Bank of Canada, who died at Halifax, N.S., Oct. 25, aged 75, was a member of the Royal Commission on Railways appointed by the Dominion Government in 1886.

The London, Eng., County Council has granted permission to its Chief Engineer, Maurice Fitzmaurice, C.M.G., to join the board of engineers formed to deal with the rebuilding of the Quebec Bridge.

Sir George and Lady Drummond entertained Viscount Milner at dinner, in Montreal, Nov. 2, at which were also present Sir Montagu and Lady Allan, Lady Shaughnessy and Senator L. J. and Madame Forget.

R. R. Jamieson, who recently resigned the position of General Superintendent Central Division, C.P.R., is reported to have accepted the invitation to run as a candidate for the Mayoralty of Calgary, Alta., where he is now residing.

G. M. Bosworth, Fourth Vice-President C.P.R., sailed from Quebec Oct. 31 for England, on the Empress of Britain, and returned to Canada accompanied by Mrs. and the Miss Bosworth, on the same vessel, Nov. 19.

D. B. Hanna, Third Vice-President Canadian Northern Ry., sailed from New York, Nov. 21, on the s.s. Celtic, for England, where he will join the President, W. Mackenzie. They are both expected to return to Toronto before Christmas.

H. E. Carry, C.E., who has for some time been engaged in business in Merritt, B.C., has removed his office to Vancouver. During the past summer he has had charge of a survey party operating for the C.P.R. between Nicola and Penticton, B.C.

G. H. Pelletier, son of H. A. Pelletier, employed in the Richelieu and Ontario Navigation Co.'s supply department at Montreal, has been presented with the Royal Canadian Humane Society's medal for bravery in a rescue of an infant from drowning.

In an action against Mrs. Mackenzie, wife of W. Mackenzie, President Canadian Northern Ry., for damages for trespass on some ground situated next to some of her property at Balsam Lake, Ont., the Court found for the plaintiff, and assessed the damages at $150.

C. M. Hays, Second Vice-President and General Manager G.T.R., returned to Montreal, Oct. 30, from his trip of inspection over the G.T. Pacific Ry., and points in British Columbia. He left Montreal again Nov. 16 for Quebec, whence he sailed for England.

H. N. Kitson, member of the Ontario Railway and Municipal Board, while driving on Main St., Hamilton, Nov. 22, was thrown from the vehicle through the horse slipping, and sustained a rather severe shaking, which necessitated his absence from duty for a few days.

David Hobbs, at one time in charge of the C.P.R. Customs Department, Montreal, and who was sentenced, in 1904, to 5 years in the penitentiary, for fraud on the company, and recently released, died Nov. 1, in the Western Hospital, where he had been removed after having been run over by a C.P.R. train.

Rev. Father Burke, who has taken up his residence in Toronto in connection with the newly established Catholic Church Extension Society, was, while living in Prince Edward Island, a most active and enthusiastic advocate of the project for the construction of a tunnel to connect the island with the mainland.

Sir Edward Stracey, partner in Sperling & Co., the British financial firm interested in the Canadian Northern Ry., and other Canadian transportation undertakings, arrived in Montreal Nov. 21, in connection with the meetings of some of the Mexican electrical concerns in which the firm is interested.

C. W. Morse, at one time head of the Consolidated Steamship Co., of which the Eastern Steamship Co., operating vessels between Halifax, St. John and Boston, forms a part, was recently convicted of fraudulently dealing with the funds of a bank in which he occupied a leading position, and sentenced to 15 years in the penitentiary.

R. H. Ingram, who was recently appointed General Manager of the Cananea, Yaqui River and Pacific Rd., is a native of Montreal, and was for a number of years in G.T.R. service, severing the connection at the time that C. M. Hays, now Second Vice-President and General Manager G.T.R., left that company for the Southern Pacific Rd. service.

C. B. Foster, Assistant General Passenger Agent C.P.R., Vancouver, B.C., was presented recently with a grandfather's clock in mahogany with matched silver dial, by the staff of the District Passenger Agent's Office, Toronto, and ticket agents in Ontario, of which he was the head, before being promoted to his present position.

A portrait of J. A. Galbraith, D.Sc., Dean of the Faculty of Applied Science in the University of Toronto, was unveiled in the Convocation Hall Nov. 4. The portrait was presented to the University by the graduates and undergraduates of the School of Practical Science, with which Dr. Galbraith had been connected, as Principal, since its foundation in 1881.

J. R. Bowles, City Freight Agent, G.T.R., Montreal, was born in 1874, and entered G.T.R. service in 1893 as messenger at Petrolea, Ont., since when he was successively billing clerk, stenographer, cashier, relieving agent, and chief clerk, Local Freight Department, Montreal Terminals, to May 1, 1908, at which date he was appointed to his present position.

Lieut. C. W. W. McLean, son of Col. H. H. McLean, Vice-President St. John, N.B., Ry., and one of the Counsel for the Canadian Street Railway Association, has been promoted to be Captain in the Royal Horse Artillery, and sailed for England recently to take up his duties. Capt. McLean saw service in South Africa, where he was A.D.C. to General Colville, and has latterly been stationed in India.

R. A. Burford, Cashier C.P.R., New York, was born at Brooklyn, N.Y., Oct. 4, 1878, and entered railway service July, 1901, since when he has been, to Jan., 1902, clerk in C.P.R. Immigration Office, New York; Jan. to Nov., 1902, ticket agent C.P.R., New York; Nov., 1902, to Feb., 1906, City Passenger and Freight Agent C.P.R., Buffalo, N.Y.; Feb., 1906, to Sept., 1908, City Passenger Agent C.P.R., Buffalo, N.Y.

Frank C. Foy, son of the late John Foy, President Niagara Navigation Co., and who

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was recently appointed Canadian Passenger Agent, New York Central Lines, Toronto, was born there, July 5, 1881, and entered transportation service Oct. 10, 1899, with the Niagara Navigation Co. He was appointed city ticket agent, New York Central Lines, Toronto, Sept. 15, 1902, which position he held until Oct. 7, 1908, the date of his present appointment.

H. Gates Reid, whose appointment as Master Mechanic, C.P.R. Lake Superior Division, North Bay, Ont., was announced in our Nov. issue, entered C.P.R. service Mar., 1884, and was, to Nov., 1884, wiper; Nov., 1884, to Nov., 1887, fireman; Nov., 1887, to Dec., 1904, engineer; Dec., 1904, to June, 1905, relieving road foreman of locomotives; June, 1905, to Mar., 1907, engineer; Mar. to April, 1907, general foreman, Chapleau, Ont.; April, 1907, to Oct., 1908, District Master Mechanic, Lake Superior Division, district 1, North Bay, Ont., all service with C.P.R.

Gordon Ross, a student at Bishops' College, Lennoxville, Que., and son of W. G. Ross, Managing Director Montreal Street Ry., was accidentally shot on Nov. 8 near Woodlands, his father's summer home, about 20 miles from Montreal up the St. Lawrence River. He was in a boat with the caretaker of the house when his gun was discharged. the charge entering his right arm and badly shattering it. As quickly as possible a special C.P.R. train was procured from Montreal, and he was rushed to the Royal Victoria Hospital. At first it was thought he would lose his arm, but this danger is now apparently over, though it is very doubtful if he will be able to use it to any extent.

Paragraphs have appeared in various daily newspapers recently purporting to record an interview between the Emperor of Germany and Archer Baker, European Manager C.P.R., London, Eng., at Kiel, in which it is said that arrangements were considered for an early visit of the Emperor to Canada. The origin of the story can be traced to an incident which took place about four years ago at Kiel, when M. Baker, on his introduction to the Emperor, was reported to have suggested a visit, and to which the reply was given that when the C.P.R. ran vessels across the Atlantic in four days, it might be considered. In the press reports Mr. Baker is described as "M.P.," an honor for which we feel sure he has no desire.

The following retired employes of the Intercolonial Ry., not being employes of the administrative or clerical branches of the civil service, have been awarded the Imperial Service Medal, in recognition of long and meritorious service: A. Belanger, section foreman; E. Boak, freight agent; S. Buchanan, section foreman; G. Cameron, stores issuer; L. Collet, pumpman; M. Doyle, carpenter; A. Duquemin, station master; D. Fraser, section foreman; E. Guay, station master; R. Harrison, section man; J. Johnson, engine man; W. Kelly, track master; A. Leger, track man; J. Lockhart, section foreman; R. McDonald, engine man; D. S. McKay, section foreman; G. Malcolm, foreman shunter; M. Pelletier, locomotive cleaner; J. Simmons, blacksmith; R. Wallace, fitter; and G. Wilson, section foreman.

E. V. Skinner, Assistant Traffic Manager C.P.R., New York, who died there, Nov. 7, as the result of an apoplectic seizure, was born in London, Eng., Apr. 22, 1849, and entered railway service in 1879, as Passenger Agent, New York, Lake Erie and Western Rd., since when he was consecutively: 1881 to 1882, Passenger Agent, Pennsylvania Rd.; 1882 to 1885, Passenger Agent, New York, Lake Erie and Western Rd.; and from 1885 until the road was purchased by the Vanderbilt interests, he was General Eastern Agent, West Shore Rd., after which he was appointed General Eastern Agent, C.P.R., at New York, and from Mar. 1, 1904, to the date of his death he was Assistant Traffic Manager, same road. The funeral, which took place at Yonkers, N.Y., Nov. 9, was attended by R. Kerr, Passenger Traffic Manager, and S. P. Howard, General Freight Agent, Eastern and Lake Superior Divisions, C.P.R.

N. J. Power, who has retired from the position of General Auditor, G.T.R., under the provisions of the company's pension rules, was born at Rochester, N.Y., May 19, 1843, and entered railway service 1859, since when his record has been: 1859 to 1867, clerk Freight Department, Great Western Ry., Hamilton, Ont.; 1867 to 1873, chief bookkeeper Accountant's office, same road; 1873 to 1878, Accountant, same road; 1878 to 1882, General Auditor, same road; 1882 to 1886, Assistant Accountant G.T.R., which in 1882 took over the G.W.R.; 1886 to April, 1892, Secretary of Audit Board G.T.R., Montreal; April, 1892, to April, 1896, General Passenger Agent G.T.R.; April, 1896, to Jan. 1, 1907, Auditor of Disbursements, G.T.R.; and Jan. 1, 1907, to Oct. 31, 1908, General Auditor, G.T.R., Montreal. Mr. Power left Montreal with his family, Oct. 30, for Pasadena, Cal., where he will in future reside.

Joseph Hobson, Consulting Engineer, G.T.R., whose portrait appears on the first page of this issue, was born at Guelph, Ont., 1834, and entered railway service in 1858, since when he has been consecutively to June, 1860, assistant engineer G.T.R. construction west of Toronto, and subsequently assistant engineer on various lines in Nova Scotia, Ontario, and Michigan; June, 1869, to April, 1870, engineer construction Wellington, Grey and Bruce Ry.; April, 1870, to Nov., 1873, resident engineer International Bridge, Buffalo, N.Y.; Nov., 1873, to June, 1875, chief assistant engineer Great Western Ry.; June, 1875, to Feb., 1896, Chief Engineer same road; (during this period the G.W.R. was absorbed by the G.T.R.); Feb., 1896, to Aug. 1907, Chief Engineer G.T.R. System. He was the Chief Engineer of the St. Clair Tunnel Co. from its organization to the completion of the work, and is still a director of the company; is a member of the Institute of Civil Engineers, London, Eng.; of the American Society of Civil Engineers; of the Canadian Society of Civil Engineers, and is an Ontario and Dominion Land Surveyor.

The lists of officers for the current year of the various International railway associations, contain a fair percentage of Canadian railway officials. A feature, however, is that a larger proportion than in any previous year almost, are either presidents or vice-presidents. The names on the lists include: J. E. Quick, General Baggage Agent G.T.R., Toronto, Secretary-Treasurer American Association of General Baggage Agents; G. T. Bell, General Passenger Agent, G.T.R., Montreal, President American Association of General Passenger and Ticket Agents; W. McNab, Principal Assistant Engineer, G.T.R., Montreal, President American Railway Engineering and Maintenance of Way Association; H. H. Vaughan, Assistant to Vice-President, C.P.R., Montreal, First Vice-President American Railway Master Mechanics' Association; W. A. Cooper, Superintendent C P.R. Dining and Sleeping Car service, Montreal, Vice-President American Association of Dining Car Superintendents; W. J. Camp, Electrical Engineer C.P.R. Telegraphs, Montreal, President American Association of Railway Telegraph Superintendents; J. H. Callaghan, General Storekeeper C.P.R., Montreal, President Railway Storekeepers' Association; F. Scott, Treasurer G.T.R., Montreal, First Vice-President Society of Railway Financial Officers. There may be added to these the name of C. A. Jaques, Montreal, who is President of the International Water Lines Association.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

Canadian Westinghouse Co. has issued circular 1126, dealing with Westinghouse types C and CL transformers.

John L. Walker, heretofore Auditor for The Buda Foundry and Mfg. Co., has resigned to become Manager of the "Use-Em-Up" socket department of the American Specialty Company, Chicago, Ill.

The Goldschmidt Thermit Co. has issued an illustrated pamphlet, "Applications of Thermit in foundry practice," describing the uses to which Thermit may be put, with details of instructions to be followed.

The Brown Hoisting Machinery Co., Cleveland, O., issues catalogue E relating to grab buckets for ore, and general excavating work; automatic tubs and buckets, etc., with illustrations of several of the plants installed. A special catalogue is also issued, describing the ferro-inclave steel sheeting for roofing, etc.

The Alexander Milburn Co., Baltimore, Md., has recently shipped a number of its 5,000 candle power lights to Vancouver, B.C.; to Mexico; The California Reclamation Co., San Francisco, Cal.; Lane Bros. & Jones, who are constructing the large Forest Park reservoir; The Nevada Consolidated Copper Mines, and to the Great Lakes Construction Co., Buffalo, N.Y.

Canadian Rand Co., Montreal, has issued an air and gas compressor catalogue of over 100 pages, in which the details of construction are fully dealt with and the proper design of compressors for various kinds of work are pointed out. The catalogue is beautifully printed and illustrated, and will be of great value not only to buyers of compressors but also to men in charge of compressors.

Warren L. Boyer, formerly with the Peckham Truck Co., and later on with the New York Car and Truck Co. at Kingston, N.Y., has become associated with the American Brake Shoe and Foundry Co. as assistant in the Engineering Department. His duties will be to look after the standardization of brake heads and brake shoes on the lines of the American Street and Interurban Railway Association's standards.

R. W. Hunt & Co., Consulting and Inspecting Engineers, Chicago, Ill., and Montreal, have been awarded by the Chicago and Northwestern Rd. the inspection of the structural materials entering into the new terminal station, of which the steel will amount to about 24,000 tons. The same firm has been given the inspection of the steel to be used in the Blackstone Hotel now being erected at the corner of Michigan Ave. and Hubbard Court, Chicago.

The Canadian Society of Civil Engineers will hold its annual meeting in Toronto, Jan. 28, 29 and 30, 1909.

The fuel agents of the various railway companies on the continent, at a meeting in Chicago recently, decided to form an association of those engaged in the purchasing, distributing, handling and accounting of fuel on the railways throughout America. An organization committee was formed, of which T. Britt, General Fuel Agent C.P.R., Montreal, was elected a member.

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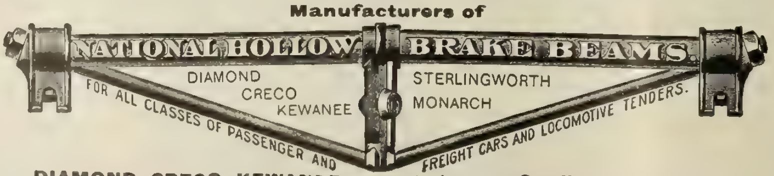

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MONTREAL, - QUEBEC

I. A. YOUNG,
AGENT

TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Boston and Albany Rd.—J. F. Fairlamb, General Passenger Agent, New York Central and Hudson River Rd., has also been appointed General Passenger Agent, B. and A.R., vice A. S. Hanson, transferred. Office, Grand Central Station, New York.

A. S. Hanson, heretofore General Passenger Agent, has been appointed General Agent. Office, South Station, Boston, Mass.

Canadian Northern Ry.—A. A. McDonald, Contracting Freight Agent, Montreal, having resigned, the work will in future be done by W. Dixon, heretofore in the District Freight and Passenger Agent's office, Great Northern Ry. (U.S.), Montreal, who has been appointed Soliciting Freight Agent, C.N.R., Montreal.

Canadian Pacific Ry.—J M. Burke, heretofore road foreman of locomotives, has been appointed District Master Mechanic Atlantic Division. Office, Brownville Jct., Me.

M. J. Buckley, heretofore locomotive foreman Three Rivers, Que., has been transferred to a similar position at the city of Quebec, vice A. Fortin, resigned.

J. Gregoire has been appointed locomotive foreman at Three Rivers, Que., vice M. J. Buckley, transferred to the city of Quebec.

G. S. Cantlie, heretofore Superintendent Car Service Department, Montreal, is reported to have been appointed General Superintendent Car Service Department. Office, Montreal.

Norman Ham, heretofore in the Board of Railway Commissioners' offices, Ottawa, has been appointed in charge of the percentage division, C.P.R. Freight Tariff Bureau, Montreal.

G. T. Fulton has been appointed District Master Mechanic district 2, Lake Superior Division and Chalk River section of district 4, including Brockville branch. Office, Carleton Jct., Ont.

C. A. Stark, heretofore Division Master Mechanic North Bay, Ont., has been appointed general foreman, Carleton Jct., Ont.

John Burns, heretofore general foreman, North Bay, Ont., has been appointed District Master Mechanic, district 1, Lake Superior Division, vice H. Gates Reid, promoted. Office, North Bay, Ont.

W. H. Fletcher has been appointed general foreman at North Bay, Ont., vice J. Burns, promoted.

Jno. McCallum, heretofore Bridge and Building Master, district 2, Lake Superior Division, has been appointed Assistant Superintendent same district, in charge of maintenance of way and structures, and such other duties as may be assigned. Office, White River, Ont. Transportation matters in this district remain as heretofore in charge of W. B. Way, Assistant Superintendent.

On account of the resignation of F. E. Quinn, Assistant General Baggage Agent, Pacific Division, and B.C. and Pacific Coast Steamship Service, the jurisdiction of J. Sparks, Assistant General Baggage Agent, Western Lines, Winnipeg, has been extended to include Pacific Division and the B.C. and Pacific Coast Steamship Service. He reports to the General Baggage Agent, Montreal.

D. C. Coleman, heretofore Superintendent district 3, Pacific Division, Nelson, B.C., has been appointed Superintendent Car Service Department, Western Lines. Office, Winnipeg.

J. A. Macgregor, heretofore Assistant Superintendent Car Service Department, Winnipeg, has been appointed Superintendent district 4, Central Division, vice Allan Purvis, transferred. Office, Souris, Man.

M. Tolan has been appointed agent Sleeping, Dining and Parlor Department, Moose Jaw, Sask., vice H. M. Peacock, resigned.

R. D. Smith, heretofore road foreman of locomotives Medicine Hat, Alta., has been appointed District Master Mechanic district 2, Western Division. Office, Medicine Hat, Alta. The position of road foreman of locomotives has been abolished.

J. F. Kane, heretofore chief clerk Second Vice-President's office, Winnipeg, has been appointed Fuel Agent Western Division, vice W. B. Harris, transferred. Office, Calgary, Alta.

R. L. Pickell has been appointed city ticket agent Edmonton, Alta. Office, 145 Jasper Ave. East.

A. D. Ayer has been appointed agent Sleeping, Dining and Parlor Car Department, Cranbrook, B.C., vice W. T. Murray, transferred to Winnipeg.

Allan Purvis, heretofore Superintendent district 4, Central Division, Souris, Man., has been appointed Superintendent district 3, Pacific Division, vice D. C. Coleman, promoted. Office, Nelson, B.C.

H. J. Maguire, heretofore Travelling Baggage Agent, Winnipeg, has been appointed District Baggage Agent for the Pacific Division and the B.C. and Pacific Coast Steamship Service, vice F. E. Quinn, resigned. Office, Vancouver, B.C.

F. L. Hay has been appointed acting Superintendent Sleeping, Dining and Parlor Car Service, district 5, Vancouver, vice H. R. Bain, resigned.

Lincoln Smith, formerly Superintendent C.P.R. Upper Lakes Service, Owen Sound, Ont., and latterly in the Steamship Department's office, Montreal, has been transferred to the office of Capt. J. W. Troup, General Superintendent C.P.R. British Columbia Coast Service, Victoria, B.C., as chief clerk.

No appointment has been made of a successor to the late E. V. Skinner, as Assistant Traffic Manager, New York. F. W. Dudley, Eastern Passenger Agent, and W. F. Stevenson, Eastern Freight Agent, are carrying on the work under these titles, which they have held for some time past.

A. E. Disney, heretofore chief clerk, has been appointed City Passenger Agent, C.P.R. Atlantic Steamship Lines, Chicago, Ill.

W. F Bloomquist has been appointed Travelling Passenger Agent C.P.R. Atlantic Steamship Lines, vice T. J. Burns, promoted. Headquarters, Chicago, Ill.

J. J. Forster has been appointed Travelling Passenger Agent C.P.R. Atlantic Steamship Lines, vice T. J. Barnes, promoted to City Passenger Agent C.P.R., St. Louis, Mo. Headquarters, Chicago, Ill.

T. J. Burns has been appointed North-Western Passenger Agent C.P.R. Atlantic Steamship Lines. Office, Minneapolis, Minn.

H. Debenham ceased to act as the company's representative in Antwerp, Belgium, on Oct. 31. S. W. Cruse has been appointed as his successor, the appointment to take effect Jan. 1, 1909, until which date W. R. Crighton will have charge of the company's business at Antwerp.

Grand Trunk Pacific Ry.—A. Watt, heretofore acting locomotive foreman Melville, Sask., has been transferred to Wainwright, Alta., with charge of all matters pertaining to the Motive Power and Car Departments there.

C. D. Fisher, heretofore trainmaster at Melville, Sask., has been granted extended leave of absence, and the position has been abolished.

D. L. Jones has been appointed locomotive foreman Melville, Sask., with charge of all matters pertaining to the Motive Power and Car Departments there, vice A. Watt, transferred.

Grand Trunk Ry.—The following agents have been appointed: Lennoxville, Que., E. J. Astell; Sherbrooke, Que., Wm. Harrison; St. Michel (Passenger), Que., Mrs. H. Roy; St. Annes, Que., W. J. James; Kirkfield, Ont., W. R. Dickson; Kinmount, Ont., R. A. Levia; Powassan, Ont., J. J. Carey (temporary); Thornton, Ont., T. Barlow; Colwell, Ont., J. Mitchell; Forest, Ont., W. Middleton; Copetown, Ont., W. G. Baker; Bright, Ont., H. C. Baird; Burgessville, Ont., D. W. Walton; Tara, Ont., C. H. Smith.

Hull Electric Co.—W. R. Baker, Secretary C.P.R., who is also Vice-President and General Manager Hull Electric Co., has issued a circular announcing that W. R. Taylor having resigned from the latter company's service, C. C. Pangman has been appointed Secretary-Treasurer, with office in Montreal; and C. G. Gale, heretofore Superintendent Power Section, has been appointed acting General Superintendent with office at Deschenes, Que. This company operates the electric railway between Ottawa, Ont., and Aylmer, Que.

Intercolonial Ry.—J. T. Hallisey, acting Superintendent Halifax and St. John District, has been appointed Superintendent, vice G. M. Jarvis, deceased.

National Transcontinental Ry.—A. Fronhoefer, who was formerly engaged on the C.P.R. second track work between Montreal and Smith's Falls, Ont., has been appointed Division Engineer, division 4, District D, National Transcontinental Ry.

New York Central and Hudson River Rd.—In announcing the resignation of E. J. Richards, Chief Assistant General Passenger Agent, in our Nov. issue, the name, by an error, appeared as E. J. Richard.

New York Central Lines.—F. A. Linderman, heretofore foreman boiler maker, Michigan Central Rd., Jackson, Mich., has been appointed Supervisor of Boilers, vice G. Wagstaff, resigned. Office, West Albany, N.Y.

Toronto, Hamilton and Buffalo Ry.—J. Millard has been appointed Roadmaster, vice R. G. Gray, resigned. Office, Hamilton, Ont.

◆

The Central Vermont Ry. and the Standard Oil Co.—In the action brought by the U.S. Government to secure the dissolution of the Standard Oil Co., G. B. Ferguson, a clerk in the Central Vermont Ry. Co.'s offices, gave evidence Oct. 29. After enumerating various tariffs in force on the line, none of which he declared had been secret, he was specially examined by the Government attorney, who elicited the information that a special rate had been issued to the Standard Oil Co. Pressed as to what other shippers had benefited from this special tariff the witness said that as far as he knew the rate applied only to the Standard Oil Co. The extent of the preference accorded to the Standard Oil Company by the C.V.R. was shown in two letters quoting freight rates per carload. In one instance the rate was given as $33 a carload, while in the other case the rate quoted was $23. The witness admitted that the $23 rate was the one under which the C.V.R. carried the Standard Oil Co.'s shipments.

The Quebec Court of Appeal has reversed the judgment of the court below, in the action of the C.P.R. against the Hochelaga Bank, to recover $500 for five cheques previously cashed by the C.P.R. agent at St. Jerome, who subsequently became an embezzler.

The Port Stanley, Ont., magistrates have, in view of the decision of the Board of Railway Commissioners, decided to dismiss the case against the Pere Marquette Rd. for violating the Lord's Day Act, by doing alleged unnecessary shunting from the ferry boats there on Sundays.

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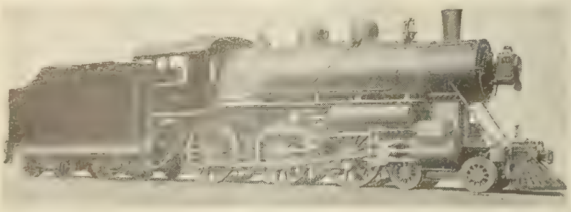
SINGLE EXPANSION AND COMPOUND



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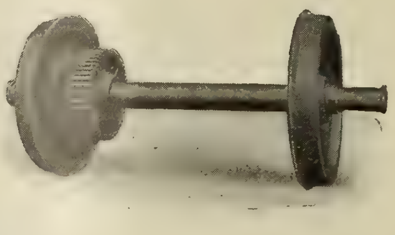
WINNIPEG, MAN. REPRESENTATIVES



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ELLIPTIC AND HELICAL SPRINGS

New Trails to the
Canadian Game Lands

Before the six railways of the Canadian Northern System followed the old fur trails into the Canadian game lands, only a hardy few dared to go in. But now, the back places of the woods—wealthy in moose, caribou, deer and bear—may be quickly and easily reached. The Canadian Northern system serves a wide range of undisturbed territories. Here are a few suggestions:

The country between Parry Sound and Sudbury, traversed by the CANADIAN NORTHERN ONTARIO RAILWAY, is a land of lonely muskeg and brulé, the native country of the white-tailed deer. From Sudbury north to Sellwood this same line goes in through a moose hunting territory unequalled in Ontario.

The CANADIAN NORTHERN QUEBEC and QUEBEC AND LAKE ST. JOHN RAILWAYS span the native country of the ouananiche, northern brook trout, and the spruce-shored lakes of the Roberval country, where moose and caribou abound.

The eastern shore of Nova Scotia, from Yarmouth to Halifax, is served by the HALIFAX AND SOUTH WESTERN RAILWAY. On the barrens, slightly inland from the railway, are some of the best places for big moose in the east.

THE CANADIAN NORTHERN RAILWAY from Port Arthur to Edmonton, with many branches, griddles almost undisturbed haunts of moose, caribou, deer, wolves, bear, and all species of four-footed and feathered game.

For Information, General and Special, Address the Information Bureau, Canadian Northern Railway, Toronto

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Standard Steel
Platforms
Used by all Canadian Railways

The Canada Iron Corporation, Limited.

Parr's Bank, Ltd., London, Eng., under authority of the Western Canada Trust, Ltd., also of London, contractors for the loan, offered for subscription at the end of October, £360,000 six per cent. 1st mortgage bonds of the Canada Iron Corporation, Ltd., at £99, 10s. per cent., out of an issue of £500,000, part of a total authorized issue of £600,000, of which £100,000 is held in reserve and £136,000 is taken in exchange bond for bond, by holders of bonds in the companies consolidated in the Canada Iron Corporation. The prospectus states that the whole of the amount offered had been underwritten, £100,000 having been underwritten in Canada. £120,000 were taken firm. The capital stock of the corporation is $8,000,000, divided into $3,000,000 six per cent. preferred and $5,000,000 common, of which $2,759,000 preferred and $4,687,000 common will be issued as fully paid to the vendors of the properties consolidated.

The corporation has been formed to acquire and consolidate under one management the Canada Iron and Foundry Co., Ltd.; The Canada Iron Furnace Co., Ltd.; Jno. McDougall & Co.; The Annapolis Iron Co., Ltd.; and the majority of the stock of the Londonderry Iron and Mining Co., Ltd. These companies own the following properties: Blast furnaces at Midland, Ont.; Radnor Forges at Drummondville, Que., and Londonderry, N.S.; foundries and works at Hamilton, St. Thomas, Midland and Fort William, Ont.; Three Rivers and Montreal, Que., and Londonderry, N.S. The iron mines are: Mayo mine, Hastings County, and one in Renfrew County, Ont.; Radnor Forges and Drummondville, Que.; and near Bathurst, N.B.; Annapolis and Londonderry, N.S. The furnaces have a combined capacity of about 87,000 tons of pig iron per year. The foundries, which have a capacity of from 125,000 to 150,000 tons of castings per year, are principally engaged in the manufacture of cast iron pipes and chilled iron car wheels. They have contracts with municipalities, etc., throughout the Dominion for pipes, and regularly supply car wheels to a large number of railway companies. It is intended to use part of the proceeds of the bond issue in doubling the capacity of the furnaces and adding to the foundry plants.

The profits of the companies being consolidated are given as follows:

Canadian Iron & Foundry Co., Ltd., year ended May 31, 1908	$154,720.88
Canada Iron Furnace Co., Ltd., year ended April 30, 1908	58,759.53
John McDougall & Co., average for two years	8,500.00
	$221,980.41

The financial crisis in the U.S. caused some falling off in Canadian trade last winter, but the earnings of these companies were well maintained under the circumstances. For the previous year their combined profits were $257,951.

The directors of the Corporation are: T. J. Drummond, Montreal, President; G. E. Drummond, E. McDougall, Montreal; C. C. Chipman, Winnipeg; H. Cockshutt, Brantford; and G. Gudewill, Bremen. The London committee of directors are. Sir Jas. Heath, Bart.; I. H. Benn, R. W. Cooper and J. R. Tennant.

◆

Canadian Railway Club.—At the monthly meeting Nov. 3, W. V. Turner, Mechanical Engineer of the Westinghouse Air Brake Co., read an elaborate paper on brakes for freight cars, both from an economic and operative point of view, prepared by himself and his assistant, S. W. Dudley. The paper is most complete in every way and forms a treatise of great value to all interested in air brake work.

Central Railway and Engineering Club.—At the monthly meeting, Nov. 17, a paper on the electrification of the St. Clair tunnel by W. D. Hall, Superintendent of the tunnel, was read. The main points in the paper are covered in the article on this subject which appears on the first pages of this issue. Following the reading of the paper, Acton Burrows, Vice-President of the C.R. and E. Club, gave some detailed information about the operation of the tunnel, showing the decreased cost owing to the electrification, the increased capacity for handling traffic, etc., the data having been prepared by H. L. Kirker, Resident Engineer of the Westinghouse Co.

The I.C.R. employés, resident in Moncton, N.B., are petitioning the Minister of Railways for permission to allow them to enter into civic politics.

The National Transcontinental Railway Commissioners have issued to contractors engaged on the line, a circular dealing with the handling of explosives, with information respecting rock excavations, etc. The circular was compiled by W. A. James, who acted as engineer in charge of C.P.R. double track between Fort William and Winnipeg.

The Central Vermont Transportation Co. has been organized at Portland, Me., to carry on a steamship service between New London, Conn., and New York, in connection with the Central Vermont Ry. The directors named are: C. M. Hays, Second Vice-President and General Manager G.T. R., Montreal; G. C. Jones, General Manager Central Vermont Ry., St. Albans, Vt.; and C. A. Hight, Solicitor G. T. R., Portland, Me.

C.P.R. Western Lines Construction.

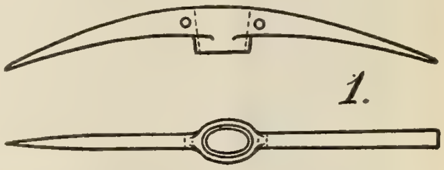
Following is a statement showing track laid on C.P.R. Western lines from Jan. 1 to the end of the current construction year, also the mileage under construction at the end of the year and the names and addresses of the contractors:

Location.	Miles Track Laid 1908	Miles Under Construction Dec., 1908	Contractor.
Manitoba—			
Teulon North	2.0	26.5	C.P.R.
Mowbray Extension	4.0	2.5	P. R. Lamb, Winnipeg.
Virden North	....	10.0	P. R. Lamb, Winnipeg.
	6.0	39.0	
Saskatchewan—			
Bredenbury-Esterhazy	....	20.0	
Stoughton-Weyburn	25.0	....	
Wolseley-Reston	24.0	....	
Regina-Bulyea	....	43.0	J. Bradley, Brandon.
Sheho-Lanigan	46.1	42.6	J. G. Hargrave, Winnipeg.
Pheasant Hills branch	74.6	66.1	J. D. McArthur, Winnipeg.
Moose Jaw northwesterly	101.6	....	
	271.3	171.7	
Alberta—			
Lethbridge-McLeod	12.0	19.0	J. McDonald, Lethbridge.
Pheasant Hills branch	....	65.5	J. D. McArthur, Winnipeg.
	12.0	84.5	
British Columbia—			
Kootenay Central	....	15.0	C.P.R.
Esquimalt & Nanaimo Ry	....	12.0	J. B. Bright, Vancouver.
Vancouver & Lulu Island Ry	....	9.65	J. B. Bright, Vancouver.
	....	36.65	

Repairing Railway Picks.

By I. C. Bayley.

The body of a pick is generally made of a low-grade steel, but the points are either of cast steel or high-grade tool steel. On account of the body being of a low grade, it is no unusual thing for an energetic laborer, when hammering the pick down upon the helve or handle, to split the eye or even burst it open. For this reason, in one of the railway shops, where many of these picks are repaired, the blacksmith conceived the idea of drilling two holes near either side of the eye, as shown in fig. 1, and inserting a couple of countersunk rivets, after which he declared that very few picks came to him for repairs in that particular spot. But to my mind the best wrinkle he gave to me was in welding the steel points on the ends.



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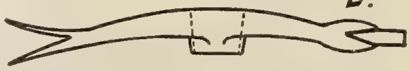

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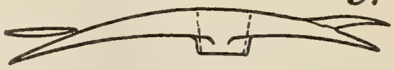

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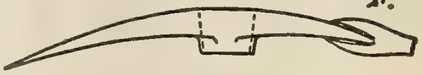

4.

Fig. 2, at the right-hand side, shows one of the usual manners of doing this. The ends of the pick are split open for a little way, to take the point, which is made wedge shape at one end, and the whole welded together and brought to a point, as in fig. 1. But it was noticed that when these same energetic laborers used their picks for levers, they came back to the shop with the points missing, and wide open jaws, as shown to the left of fig. 2.

Another method, called the German, I believe, is to weld a piece of steel on one side the point, as shown to the right of fig. 3. When any of these came back, they were worse than the first, for they came back not only minus the point, but the half-welded jaw.

It will also be seen that in both of the cases mentioned, the wear and tear of the pick is on the low-grade steel jaws as much as the high-grade steel points. So, instead of splitting open the ends of the pick, the blacksmith split the steel point as shown to the right of fig. 4. When those came back to the shop for repairs, they were generally as seen to the left of fig. 4, and only needed the points put to the emery wheels.

◆

The C.P.R. agreement, under which it could not mine coal in the Crow's Nest district, expires Dec. 31, and the company will put on the market in the new year the produce from its Elk Valley mines. A large coking plant has been erected at Hosmer, B.C., and coke will also be manufactured and sold.

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IDEAL FENCE has been adopted as a standard by all the leading Railways in Canada. More IDEAL is used by Railways this year than all other makes combined.

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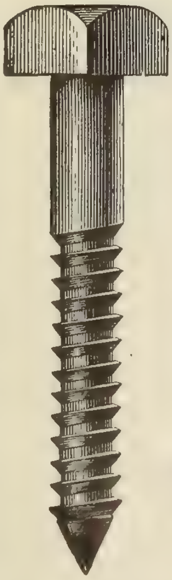

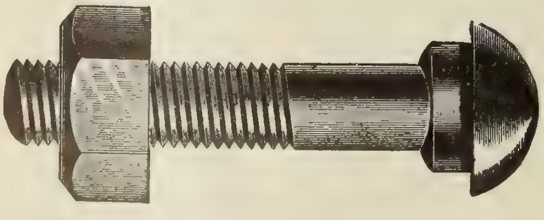

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No system is so simple to manage or maintains such a high original efficiency indefinitely.

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CANADIAN RAND CO., LIMITED

MONTREAL, QUE.

BRANCHES AT:

TORONTO, HALIFAX, WINNIPEG.

VANCOUVER, ROSSLAND, COBALT.

Government Railways Employes' Provident Fund.

The official report for the first fiscal year ended Mar. 31, 1908, shows there were 157 applications for allowances by the board, of which 142 received the approval of the Minister of Railways. The number of retired employes who died during the year was 11. The contributions made by employes were $82,707.74, the railways contributing a like amount, which with interest on monthly balances added, makes total income for the year, $167,009.84. The expenditures for the year were:

Retiring allowances	$23,913.04
Contributions refunded in cases of deceased employes	13.82
Medical examinations, employes retiring	26.00
Election expenses, 1907-08	787.33
Election expenses, 1908-09	166.85
Salaries and travelling expenses, Secretary's office	1,546.75
Wages and travelling expenses, board members	178.48
Stationery, etc	1,128.36
Total	$27,760.63

leaving a credit balance of $139,249.21. It is expected that the expenditure in the first few years will be much below the receipts, but that in subsequent years, it will increase considerably.

Following are the members of the executive board for the current year: Chairman, D. Pottinger, General Manager Government Rys.; W. A. Dube, Superintendent I.C.R., Levis, Que.; T. C. Burpee, Engineer of Maintenance I.C.R., Moncton, N.B., appointed by the Minister of Railways; and J. W. Nairn, engineman, I.C.R., Truro, N.S., and W. M. Thompson, conductor I.C.R., Moncton, N.B., elected by the employes.

◆

The Canadian Northern Ry. Co. has been assessed in $1,569 damages for the loss of a quantity of tools in transit. The tools, it is claimed, were consigned by all-rail route, but were shipped on the s.s. Monarch, which was wrecked in Lake Superior in Dec., 1907.

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ELECTRIC RAILWAYS.

Montreal Street Railway Co. Report.

The report for the year ended Sept. 30, 1908, was presented at the annual meeting, Nov. 4, as follows:

Gross earnings		$3,677,432.45
Operating expenses		2,158,394.09
Net earnings		$1,519,038.36
Interest from M.P. & I. Ry.		72,011.00
Total income		$1,591,049.36
From which deduct:		
City per cent. on earnings	$242,431.15	
Interest on bonds and loans	207,187.17	
Rental leased lines	5,019.72	
		454,638.04
Net income		$1,136,411.32
Dividend, 10%		900,724.51
Surplus		$ 235,686.81
From which has been appropriated for:		
Contingent account	$175,000.00	
Fire insurance fund	25,000.00	
		200,000.00
Transferred to general surplus		$ 35,686.81

The gross earnings increased during the year $173,789.02, or 4.96%, the operating expenses $53,740.67, or 2.55%, the net earnings $120,048.35, or 8.58%. The gross earnings show satisfactory increases considering the general depression in business, and while the operating expenses have increased, the percentage of expenses to gross earnings has decreased, being 58.69 against 60.07% for the previous year. These satisfactory results are attributed, to some extent, to the fact that the principal main lines of the company are now equipped with modern cars of the pay-as-you-enter type, which not only have induced travel but enables the conductor to properly collect his fares. The principal increase in fixed charges is due to the increased payment to the city for the percentage on earnings, the amount due the city being $242,431.15, an increase of $27,590.79 over the previous year.

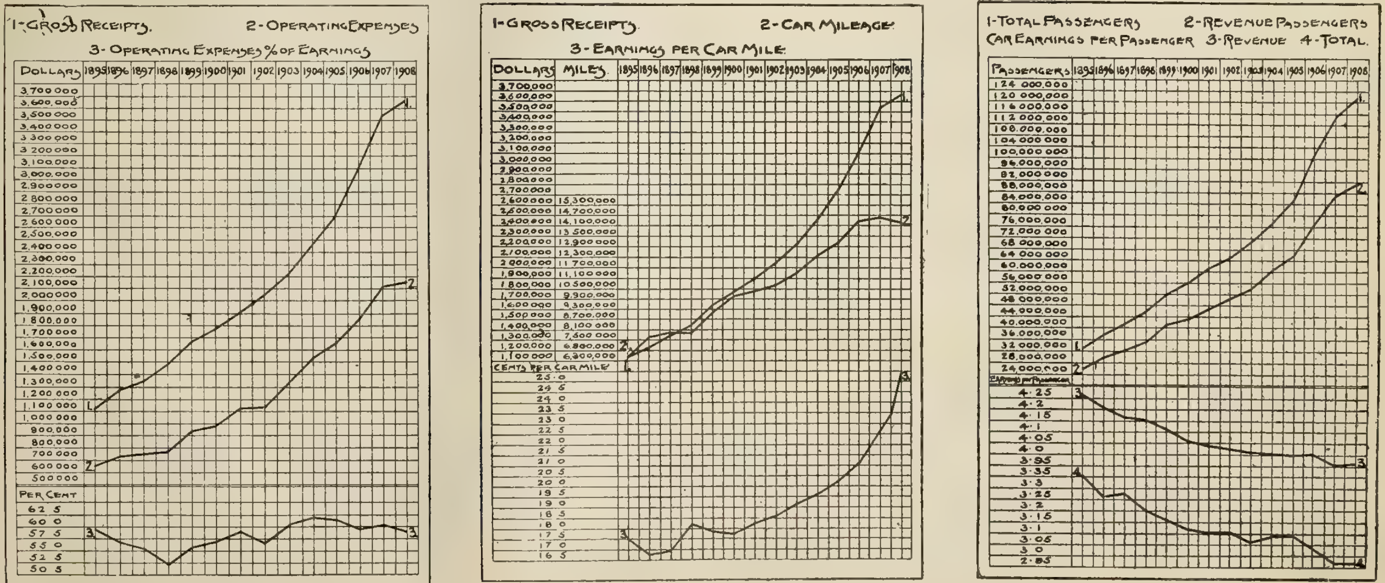
Your directors appropriated during the year from surplus earnings $175,000 for renewals to property. This amount, added to the balance of $11,637.86 carried forward from previous years, made a total credit to the account of $186,637.86. Against this there has been charged during the year $157,285.14. Your directors appropriated $25,000 from surplus earnings as a credit to the fire insurance fund. The interest on the investments for the year amounted to $17,950. The amount now at the credit of this fund is $423,959.

In accordance with the authority conferred on the directors at the special meeting of the shareholders held Feb. 1, 1908, your directors issued and sold in England £460,000 of debenture bonds, and also acting on the same authority, issued to the shareholders in July last $1,000,000 new stock at 125, the first call becoming due in August last. The discount on the bonds sold has been charged to the surplus account and the premium on the new stock credited to that account, leaving at the credit of general surplus account of $2,042,216 34, an increase of $69,513.01 over last year. The proceeds of the bonds, and the calls which have been paid in, have been used to pay off the $292,000 of bonds which matured on Feb. 1, the £208,000 of the company's notes in England which matured on June 29, and to pay off floating liabilities as well as providing for the usual capital and construction requirements for the year. The company has a substantial balance at its credit, and is in a good financial position to carry out extensions and improvements to its system as opportunity arises.

The new power house at Hochelaga was completed and put in operation in Feb., providing timely assistance during the heavy snow storms of last winter. The operation of the plant has been most satisfactory in every respect. The storage battery at Maisonneuve was completed in Nov. In April your directors entered into a 10-year contract with the Montreal Light, Heat and Power Co., on satisfactory terms, for the supply of 1,000 h.p. for use in summer only.

The city council has not taken up the question of granting further facilities in the way of new streets, in order to assist the company to handle the increasing traffic. It is to be hoped that, in the general interest and welfare of the public, the council will give the matter the attention it deserves. During the past winter the company was obliged to refuse payment of a portion of the city's account for snow, and a suit is now pending in the courts. The result of this suit will establish whether or not the council is obliged to carry on the work of snow removal in a legitimate and economical manner. The snow fall was over one foot less than the previous year, but notwithstanding this the amount the city claims to have expended was $202,639.79, an increase over the previous year of $71,897.71. At the request of the council the company made them a proposition to take over the snow removal, charging the city one-half the actual cost and limiting the city's contribution to $1,500 per mile of street. This proportion would limit their cost to much less than they are doing the work for now, with the prospect of a large saving to the public treasury. Although pressed to come to some decision in the matter, none has been arrived at, and the matter is apparently in abeyance. The company has paid to the city the usual property taxes and percentages on earnings amounting to $258,817.33, and on account of snow removal $81,714.40, making a total of $340,531.73, an increase over last year of $44,212.01.

The Montreal Park and Island Ry. Co. continues to show satisfactory progress, the net surplus for the year turned over to the



MONTREAL STREET RAILWAY GRAPHIC STATISTICS.

Montreal St. Ry. on account of interest being, $72,011.00, an increase of $16,909.56 over last year. The company completed and placed in operation the extension of its track through Notre Dame de Grace to Montreal West. This line is through a beautiful suburban country and should result in the rapidly building up of a fine residential district. Grading has been commenced on the extension of the Sault au Recollet line to opposite St. Vincent de Paul, it being the intention to complete this line next summer.

The Montreal Terminal Ry. Co. shows a net loss of $5,162.12. Since the closing of the year, which ended in June, the earnings have shown satisfactory increases, and your directors anticipate that the Montreal St. Ry. will receive some return from their investment in this company in the near future.

ASSETS.

Cost of road and equipment:		
Construction, etc.....	$4,722,429.98	
Equipment, etc......	5,139,243.48	
Real estate and build'gs	2,096,035.49	
Stock and bonds of other companies...........	3,573,674.01	
		$15,531,382.96

CURRENT ASSETS.

Montreal Park & Island Ry. advances........	$ 389,498.27	
Montreal Terminal Ry. advances............	30,786.39	
Accounts receivable....	119,435.32	
Stores................	324,191.18	
Cash.................	629,199.78	
		1,493,110.94
Fire insurance fund investment............		370,153.50
		$17,394,647.40

LIABILITIES.

Capital stock..........	$9,429,262.00	
Bonds:		
4½% payable Aug.,1922	681,333.33	
4½% payable Nov.,1922	1,500,000.00	
4½% payable May,1922	2,238,666.67	
Mortgages............	41,034.51	
		$13,890.296.51

CURRENT LIABILITIES.

Acc'ts and wages payable	$ 182,854.32	
Accrued interest.......	75,310.00	
Accrued tax on earnings	253 237.96	
Employes' securities....	17,341.10	
Unclaimed dividends...	1.956.57	
Unredeemed tickets....	51,678.84	
Dividend payable Nov.2	227,500.00	
Suspense account.......	198,944.04	
		1,008,822.83
Fire insurance fund.....	$ 423,959.00	
Contingent account.....	29,352.72	
Surplus..............	2,042,216.34	
		2,495,528.06
		$17,394,647.40

STATEMENT OF OPERATIONS.

Gross earnings..........................	$3,677,432.45
Operating expenses..................	2,158.394.09
Net earnings from operation..........	1,519,038.36
Interest from M.P. & I. Ry. Co.......	72,011.00
Total income......................	$1,591,049.36

FIXED CHARGES.

City percentage on earnings..........	$ 242,431.15
Interest on bonds and loans..........	207,187.17
Rental leased lines..................	5,019.72
Total..........................	$ 454,638.04
Net income....................	$1,136,411.32
Dividend 10%.....................	900,724.51
Surplus.........................	$ 235,686.81
From which has been appropriated:	
Contingent account..................	175,000.00
Fire insurance fund..................	25,000.00
Transferred to surplus account........	$ 35,686.81

STOCKS AND BONDS, ETC., IN TREASURY.

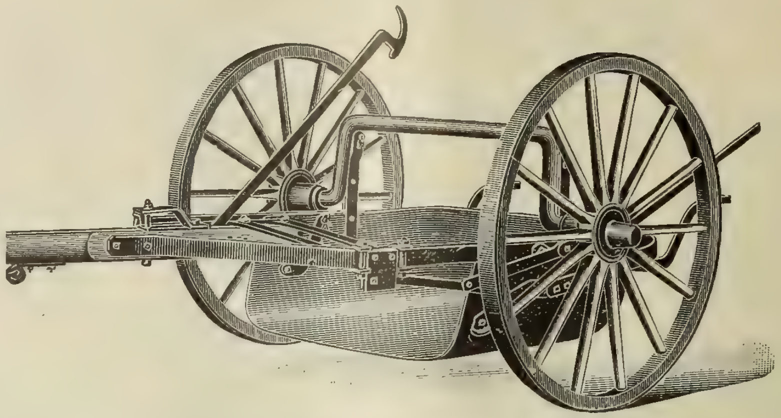
BONDS.

Montreal Park & Island Ry. Co......	$1,025,000.00
Montreal Park & Island Ry. Co. overdue interest (not included in assets).	697.442.43
Montreal Terminal Ry. Co............	613,000.00
Suburban Tramway and Power Co....	850,000.00
	$3,185,442.43

STOCKS.

Montreal Park & Island Ry. common.	$ 720,900.00
Montreal Park & Island Ry. preferred	315,000.00
Montreal Terminal Ry. Co...........	1,000,000.00
Suburban Tramway and Power Co...	850,000.00
	$2,885,900.00
Total...........................	$6,071,342.43

THE TORONTO PRESSED STEEL CO.
TORONTO, CANADA LIMITED



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MONTREAL PARK AND ISLAND RY. BALANCE SHEET, AUGUST 31, 1908.

ASSETS.

Cost of road and equipment	$2,512,969.16
Office change fund	2,000.00
Accounts receivable	807.53
Profit and loss	921,005.26
	$3,436,781.95

LIABILITIES

Capital stock—preferred	$ 315,000.00
Capital stock—common	720,900.00
Bonds	1,025,000.00
Mortgages	10,925.00
Unredeemed tickets	13,238.68
Suspense account	32,267.78
Contingent account	34,629.09
Montreal St. Ry. Co.'s loan	331,598.74
Accrued interest on bonds	752,591.38
Cumulative dividend on pref. stock	200,631.28
	$3.436,781.95

MONTREAL PARK AND ISLAND RY. CO. INCOME ACCOUNT.

Gross earnings		$ 277,634.08
Operating expenses		181,488.34
Net earnings		$ 96,145.74
Contingent for renewals		25,000.00
Net income		$ 71,145.74
Fixed charges—bonds and loans	$110,324.54	
Cumulative pref. shares	18,900.00	
		129,224.54
Deficit		$ 58.078.80

MONTREAL TERMINAL RY. CO. BALANCE SHEET, JUNE 30, 1908.

ASSETS.

Real estate construction equipment	$1,667,963.25
Office change fund	400.00
Accounts receivable	13.439.09
Profit and loss	36,087.66
	$1,717,890.00

LIABILITIES.

Capital stock	$1,000,000.00
Bonds	613,000.00
Unredeemed tickets	2,905.08
Suspense account	498.35
Montreal Street Ry. Co.'s loan	36,129.88
Accrued interest on bonds	64,432.80
Accrued tax on earnings	923.89
	$1.717.890.00

MONTREAL TERMINAL RY. CO. INCOME ACCOUNT.

Gross earnings	$ 97,354.84
Operating expenses	101,540.72
Debit balance	$ 4,185.88
Tax on earnings	976.24
Net deficit	$ 5,162.12
Interest on bonds	32,220.39
Total deficit	$ 37,382.51

At the annual meeting at Montreal Nov. 3, Hon. L. J. Forget, President, said that during the past three years the number of shareholders had increased from 910 to 1,526, the average number of shares per member being about 65. The directors were voted $7,400 for services during the year. Following are the officers and directors for the current year: President, Hon. L. J. Forget; Vice-President, K. W. Blackwell; Managing Director, W. G. Ross; other directors: R. Meighen, P. Galibert, G. Caverhill, and Sir H. Montagu Allan.

Projects, Construction and Betterments.

Brantford and Hamilton Ry.—The Board of Railway Commissioners having granted the company permission to cross the G.T.R. Tillsonburg branch in Brantford, Ont., the cars have been enabled to go right into the city since Nov. 3. Formerly the cars only ran from Hamilton to Brantford city limits. (Nov., pg. 816.)

British Columbia Electric Ry.—A further stage in the negotiations with reference to the construction of an electric railway to Port Grey, B.C., has been reached, and it is hoped that an agreement will be arrived at shortly with the company. R. H. Sperling, General Manager, has written a letter to the people at Port Grey, to the effect that the company is prepared to start construction within 30 days after a satisfactory agreement has been executed, and to prosecute the work with due diligence until completion. (Nov., pg. 816.)

The Buffalo, Lockport and Rochester Ry., which has been in operation for some weeks between Lockport and Albion, N.Y., was opened for its entire distance between Lockport and Rochester, N.Y., Nov. 17. It is expected that connection will be made in the course of a few weeks which will enable the company to run its cars into Buffalo, N.Y.

Calgary, Alta.—The Calgary, Alta., city council has apparently practically decided to construct its own street railway lines, but the negotiations with the company desiring a franchise have not yet been broken off. (Nov., pg. 816.)

Cape Breton Electric Co.—Among the improvements being undertaken by the company are the alterations to the North Sydney car barn. The construction of the blacksmith and car repair shops at Sydney has been completed.

Desjardins Inter-Urban Ry.—Application will be made next session of the Ontario Legislature for an Act incorporating a company with this title for the purpose of constructing and operating by electricity or other motive power a system of railways from some point in or near Hamilton, Ont.: (1) By way of Dundas, Webster Falls, Bullock's Corners, and the Spencer or Lindsay Creek to Galt; (2) From the same point by way of the Desjardins canal through Burlington Heights, along or near the Grandstone Creek, through Waterdown by Lake Medad, between Carlisle and Kilbride, and west of Campbelville to Guelph; and (3) From the proposed Hamilton and Guelph line, near where it crosses the Hamilton and Burlington plains roadway, to Burlington; with power to construct and operate similar lines of railway to connect the said lines with each other, and contiguous centres of business. Power will also be asked to issue bonds or other securities to the extent of $25,000 per mile of railway, and to grant running rights over its tracks to other railway companies. C. and H. D. Gamble, and E. Brown, Toronto, are solicitors for the applicants.

Edmonton, Alta.—The first car went over the Jasper Ave. line Oct. 29, and the Mayor announced that a passenger service would be started Nov. 2, and that within two weeks thereafter the full service would be given in the city. Work is being pushed on the line on the Strathcona side, and ballasting cars are being run on portions of the line.

In connection with the construction of the line between Edmonton and Strathcona, the Edmonton city council finds it necessary to apply to the Board of Railway Commissioners to obtain permission to carry its line across the railway bridge over the Saskatchewan River. (Nov., pg. 816.)

Fort William, Ont.—The new tracks recently laid on Simpson St. and Victoria Ave., Fort William, Ont., were used for the first time Oct. 24. A few days later it was shown that there was a slight difference between the gauge of the new tracks and the old ones, and that the cars had some difficulty in getting along. The difficulty has been got over by altering the gauge of the cars. (Nov., pg. 817.)

Hamilton Street Ry.—The company has notified the city council that it proposes to go ahead with the work of constructing a connection with its Bartonville and Hamilton lines at the corner of Main St. and Sherman Ave. This connection is one of the points covered by the agreement recently approved.

We are officially advised that the reports of new track construction about to be undertaken on this and other lines controlled by the Dominion Power and Transmission Co. are premature. No definite decision has been reached as to what will be done or when work will be undertaken. (Nov., pg. 817.)

Montreal and Southern Counties Ry.—Construction in Montreal on this projected railway started on Oct. 27, and tracklaying was begun Nov. 12. The bed made for the track consists of an arched bed of concrete six inches thick at the centre and 18 inches thick under the rails. The rails are tied with steel rods embedded in concrete and granite blocks are to be put down between the rails in the spring. The rails are 7½ inches high, with a six-inch base, and run from 87 to 92 lbs. It was expected to complete the track as far as Black's bridge by Nov. 30. The concrete work on Mill St. has been completed, but it is not intended to lay tracks on it, or on the approaches to the Victoria bridge until the spring. Track will, however, it is said, be laid on the bridge during the winter. Substations for the distribution of power are to be erected on the south side of the river, and it is hoped to put a service in operation by June 1. A by-law for a franchise in St. Lambert will be voted on early in Dec., and franchise by-laws are nearly ready for submission to the ratepayers in Montreal South and Longueuil. It is hoped to have construction on the south shore section of the line well advanced to Chambly and Richelieu by the summer or early fall of 1909.

Construction was started Oct. 29 on Grey Nun St., upon the first section of this electric railway, which is to connect the city with St. Lambert, Que., via the G.T.R. Victoria Jubilee bridge. The concrete work is being done by J. Quinlan & Co., Montreal, and the company is laying the track. (Nov., pg. 817.)

Montreal Park and Island Ry.—Track is being laid from the end of the company's line at Back River to St. Vincent de Paul, about four miles. The route follows the Rivière des Prairies to a point opposite St. Vincent de Paul Church. It is considered quite likely that a bridge will be constructed across the river, and a further extension of the line be made in the near future. It is expected that the line will be completed and opened for traffic by June 1, 1908.

In connection with the proposed extension to connect Ahuntsic and Cartierville, Que., the negotiations with respect to the right-of-way have not been concluded, and nothing in the way of construction has been done. (Sept., pg. 665.)

Ottawa Electric Ry.—The extension to the Dominion Experimental Farm has been completed, and a regular service has been operated since Nov. 12. (Nov., pg. 817.)

Ottawa to Morrisburg, Ont.—A press report stated, Nov. 5, that a project is under consideration to construct an electric railway from Morrisburg to the Ottawa and New York Ry., and to utilize 20 miles of that railway between Russell village and Ottawa, so as to give a complete route between Morrisburg and Ottawa. We have been advised by J. W. Allison, of Morrisburg, who was stated to be the head of the enterprise, that he has nothing to do with it. (See Morrisburg Electric Ry., Aug., pg. 583.)

St. Thomas St. Ry.—The city council has not yet reached a decision with reference to the construction of a line to Port Stanley. The argument put forward in support of the project is that with a line to Port Stanley, the line in the city, owned by the corporation, could be put on a paying basis. There is at present an electric line running from London to Port Stanley through St. Thomas, operated by the Southwestern Traction Co. The charter held by the city gives permission to operate cars to Port Stanley during the summer only. (Sept., pg. 665.)

Toronto Ry.—The question of new street car routes in Toronto came before the Ontario Railway and Municipal Board, Nov. 2 and 14. Evidence as to a number of routes which the company desired to have adopted was given, and the case was adjourned, the arguments of counsel being heard Nov. 26. The new routes are: Bay St., Front St. to Queen St.; University Avenue, Queen St. to College St.; Richmond St., Victoria St. to Church St.; Wellington St., York St. to Yonge St. The city opposes these projected lines and asks approval of a line commencing at King and Jarvis streets, to Adelaide, Bathurst, McDonnell Square, Dafoe, Niagara, Tecumseth, Queen, Claremont, Mansfield, Clinton, Bloor and Christie streets. (Nov., pg. 817.)

The Winnipeg Electric Ry. will shortly complete the construction of its new belt line at Fort Rouge, which is to connect with the line running south and east from Maryland bridge. The rails are laid in concrete from Pembina to Lilac Street, along Corydon Ave., and a gang was at work north on Lilac St. The line was expected to be completed by Nov. 30. With the completion of Higgins Ave. Subway, there will be some rearrangement of the car routes. (Nov., pg. 817.)

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Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Gross earnings for Sept., $182,226; operating expenses, $93,698; net operating earnings, $88,528; renewal funds, $14,550; net earnings, $73,978; income from investments, $13,550; net income, $87,528, against $152,568 gross earnings; $79,227 operating expenses; $73,341 net operating earnings; $10,750 renewal funds; $62,591 net earnings; $11,036 income from investments; $73,627 net income for Sept., 1907. Total gross earnings for 3 months ended Sept. 30, $537,581; net earnings, including income from investments, $255,548; against $456,334 gross, and $219,569 net, for same period 1907.

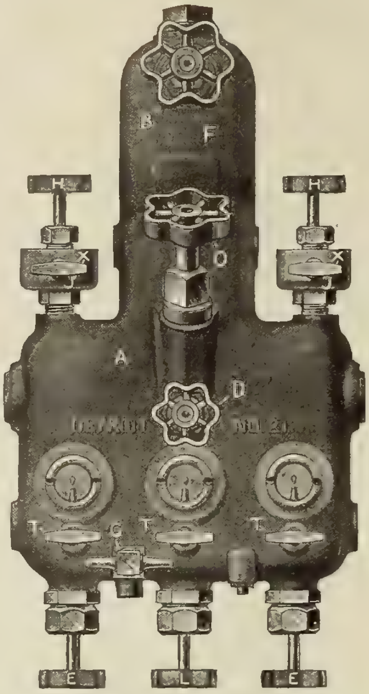
Hamilton Street Ry.—A cheque for $9,340 has been paid to the City Treasurer, being the city's share of the receipts and for mileage for the three months ended Sept. 30. This is $421 less than for the same period 1907.

Halifax Electric Tramway.—Receipts for Oct., $20,988.88, against $15,251.77 for Oct., 1907. Total for 10 months ended Oct. 30, $161,891.78, against $148,639.46 for same period 1907. Receipts for 3 weeks ended Nov. 21, $9,238.76 against $8,096.72 for same period 1907.

Montreal Street Ry.—Gross earnings for Oct., $328,608.12; expenses, $168,124.02; net earnings, $160,484.10; city percentage on earnings, $11,266.42; interest on bonds and loans, $15,769.43; rent leased lines, $444.43; total charges, $27,480.28; surplus, $133,003.82; against $311,898.38 gross earnings; $164,575.14 expenses; $147,323.24 net earnings; $10,822.02 city percentage on earnings; $16,706.31 interest on bonds and loans; $339.96 rent leased lines; $27,868.29 total charges, and $119,454.95 surplus for Oct., 1907.

St. Thomas St. Ry.—It has been decided to hold an investigation into the expenditures of the Street Ry. Commissioners at an early date. The railway is owned by the city of St. Thomas, Ont., and is operated by a commission appointed by the council.

The report of the operations for Oct. showed that 32,724 passengers had been carried against 36,847 in Oct., 1907, while the total receipts were $1,218.64, against $1,307.22 in Oct., 1907. The commissioners



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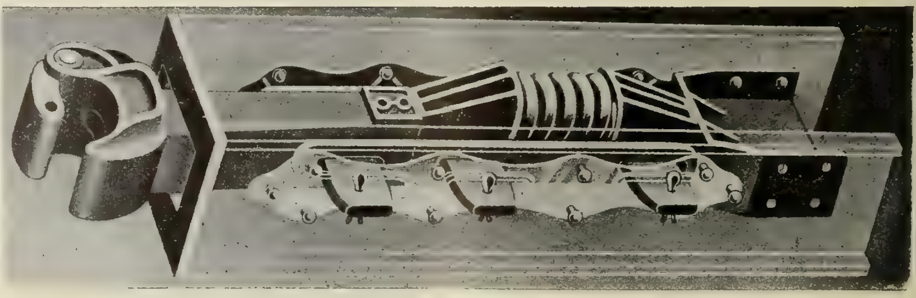

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FARLOW DRAFT GEAR CO.
BALTIMORE, MD. CHICAGO, ILL.

decided to ask the council for a further grant of $1,000 to enable current expenses to be met.

Toronto Ry.—Car earnings for Oct., $306,457.10, against $290,443.49 for Oct., 1907. Total earnings for 10 months ended Oct. 31, $2,932,079.10, against $2,818,607.90 for same period 1907.

Windsor, Essex and Lake Shore Rapid Ry.—An action has been brought by T. Elliott, of Brantford, Ont., against the company for $100,000 for alleged breach of contract. Mr. Elliott claims that he was given a contract to construct the railway, provision being made for the payment of $100,000 before the work commenced and subsequent payments after the construction had begun. The company subsequently gave the contract to a U.S. firm. Between the time when the contract was given to Elliott, and to the U.S. firm, W. Newman and A. J. Nelles, who controlled the company, are said to have sold out their interests.

Electric Railway Notes.

The Sarnia, Ont., Street Ry. Co. is arranging for the laying out of an amusement park on the shore of Lake Huron.

The report that G. B. Blanchard, Vice-President Dominion Power and Transmission Co., has resigned, has been officially denied.

The Sydney, N.S., city council has asked the Cape Breton Electric Co., and the Sydney and Glace Bay Ry., to submit plans of the fenders which it is proposed to use on these lines.

The B.C. Electric Ry. Co. has forwarded a cheque for $2,740 to the Vancouver city treasurer, in payment of the percentage due on the earnings in that city for Oct. This is the highest amount yet paid.

R. Howes, who has been connected with several similar enterprises in the U.S., has been appointed Superintendent of the electrification of the B.C. Electric Ry. Co.'s New Westminster-Chilliwack line.

The Board of Railway Commissioners has directed the Pere Marquette Rd. to interchange traffic with the Windsor, Essex and Lake Shore Rapid Ry. at Kingsville, Ont. The order is given in full on pg. 867.

The cases against N. M. Cantin, promoter of the St. Joseph and Stratford Radial Ry., for alleged false pretences and perjury at Toronto, were adjourned Nov. 4, pending the result of a civil case in which he is also involved.

The Montreal Street Ry. Co. has put in force a regulation to the effect that passengers desiring transfers must ask for them when paying their fares. This regulation has been rendered necessary by the abuse of the transfer system.

G. W. Lang, heretofore Inspector, Ottawa Electric Ry., has been appointed Assistant Superintendent. He has been with the company since within a few years of its inception, entering its service as a conductor, and being promoted to Inspector about thirteen years ago.

The Sarnia, Ont., St. Ry. has purchased one double-truck car body from the Ottawa Car Co. The motor equipment is being supplied by the Canadian Westinghouse Co., Hamilton, Ont., and the overhead appliance by the Canadian General Electric Co., Toronto.

The Toronto Board of Control has recommended that the city council apply next session of the Ontario Legislature for an amendment to the Ontario Railway Act, whereby upon motion of the municipality the Ontario Railway and Municipal Board may compel radial railway companies to operate their lines to a central point within the city to be determined by the Board.

H. M. Hopper, Secretary-Treasurer St. John Ry., is reported to have entered an action for libel against the editor of a Fredericton, N.B., journal, for statements published in connection with the recent election of Col. H. H. McLean, Vice-President St. John Ry., as a member of the Dominion Parliament for the Queens-Sunbury division.

A press report states that the Post Office Department is negotiating with the Montreal St. Ry., with a view to arranging a contract for the conveyance of mail bags within the city. Special closed cars would have to be provided, having capacity for about 400 full bags, the intention being to collect all mail matter from sub-offices in the city by this means.

C. C. Pangman, who has been appointed Secretary-Treasurer Hull Electric Co., was born Aug. 23, 1876, at Grace Hall, Lachenaie, Mascouche, Que., and entered C.P.R. service Aug., 1892, in the Comptroller's office, remaining there until Jan., 1906, when he was appointed chief clerk to the Assistant to the President, now also Secretary C.P.R., which position he still retains.

A proposal to organize a motor bus company in Toronto is, according to press reports, being discussed, and it is stated that about 50 such vehicles may be in operation by May 1, 1909. Should the venture be carried through, it is stated that it will be followed up by the introduction of taxicabs, etc. It is proposed to organize a company with a capital of $2,000,000.

W. R. Baker, Secretary C.P.R., also Vice-President and General Manager Hull Electric Co., has issued a circular announcing that W. R. Taylor having resigned from the latter company's service, C. C. Pangman has been appointed Secretary-Treasurer, and C. G. Gale acting General Superintendent. The Hull Electric Co. operates the electric railway between Ottawa, Ont., and Aylmer, Que.

J. C. M. Buntzen, of London, Eng., has retired from the position of Managing Director of the British Columbia Electric Ry. Co., and will in future reside in Copenhagen, Denmark. He will, however, continue to act as a director of the company at the urgent request of his confreres, who desire that he be in a position to maintain a supervision of the general policy of the board, and to act in an advisory capacity.

The Board of Railway Commissioners decided Nov. 16, that it had no jurisdiction to deal with the matter of the application of the Boards of Trade of Galt, Preston, Hespeler, Waterloo, and Berlin for the right of interswitching between the G.T.R. and the C.P.R., owing to the fact that the electric railways, over which the switching would be done, were constructed under provincial charters, and when they were taken over in the C.P.R. interests, they were not declared to be for the general advantage of Canada.

Canadian Street Railway Association.

The half-yearly meeting of the Association was held in Ottawa, Ont., Nov. 11 and 12, a good number of representatives of member companies being present. The President, J. E. Hutcheson, Superintendent Ottawa Electric Ry., occupied the chair.

The Windsor, Essex and Lake Shore Rapid Ry. Co. was admitted to membership.

The Secretary-Treasurer, Acton Burrows, presented a report on the Association's work during the previous six months, dealing with the following subjects among others: Carrying passengers on front seats of open cars; height of car steps; the Liverpool plow lifeguard; zone system of fares; responsibility for interlocking crossing accidents; standardization of the high tee rail; boiler insurance; B.C. Electric Ry. profit sharing scheme; taxation of track; representation by counsel; car fenders. The various sections of the report were discussed as read.

W. R. McRae, Master Mechanic Toronto Ry., read a paper on overhauling electric railway rolling stock.

The Secretary-Treasurer read a paper on the electrification of the St. Clair Tunnel, by H. L. Kirker, Resident Engineer of the Westinghouse Co.

J. Murphy, Electrical Engineer Department of Railways and Canals and Board of Railway Commissioners, read a very full illustrated paper on ice troubles in hydraulic power work and methods of overcoming them.

J. L. Payne, Comptroller of Railway Statistics, spoke on electric railway statistics, pointing out the changes proposed to be made in the schedules for the annual returns.

There were interesting topical discussions on the transfer question; detailed operating expenses and the carrying of mails and postmen. Special committees were appointed to consider the questions of transfers, the carrying of mails and postmen, and zone system of fares.

The Ontario Railway and Municipal Board, J. Leitch, A. B. Ingram, and H. N. Kitson, were present during a portion of the meetings on the Association's invitation.

The representatives attending the meeting were entertained at luncheon by the Ottawa Ry. Co., J. E. Hutcheson presiding, and W. Y. Soper representing the directorate. They were also the company's guests at a theatre party, and were taken over the new line to Britannia-on-the-Bay, and then over the extension of the line recently built to the Experimental Farm.

The next meeting of the Association will be held in Winnipeg in May, 1909.

Height of Car Steps

The question of the height of electric car steps in Toronto, West Toronto and London, came before the Ontario Railway and Municipal Board again on Oct. 28. The Chairman said at the opening that the Board was in favor of limiting the height of the lower steps to 12 inches, but that they understood there were structural difficulties in the way. W. R. McRae, Master Mechanic, and M. Power, Master Car Builder, Toronto Railway, testified that with the wheel base required on the double truck cars, with the narrow devil strip, and the radius of the curves, the car bodies could not be lowered, and the Chairman remarked that the Board would not think of passing an order to compel the company to change its existing equipment. Counsel for the applicant, Dr. Helen McMurchy, suggested that a third step should be added, when the point was raised on behalf of the Toronto Ry. that if this was done and a greater portion of the street was occupied by the cars in consequence the company might be indicted for maintaining a common nuisance. On behalf of the London St. Ry. it was contended that a third step could not be added, as it would prevent the crossing of certain bridges and also the passing of some poles. The Toronto Ry. Co. expressed its willingness to experiment with a third step, and the further hearing was indefinitely adjourned.

Grain Elevator Notes.

The British American Elevator Co. has arranged to build an elevator at Laird, Sask.

W. Stead, of W. Stead and Co., owners and operators of a line of elevators near Winnipeg, died there recently.

The Empire Elevator Co. is erecting an

elevator, with 1,000,000 bush. capacity, at Fort William, Ont.

The Consolidated Elevator Co. is reported to be arranging to erect elevators to double its present plant at Fort William, Ont.

The Farmers' Elevator Co., Cartwright, Man., has declared a dividend of 12½% for the financial year recently concluded.

The Walkerville Grain Co. is reported to be organizing in Walkerville, Ont., and it is stated that several elevators will be erected.

Muirhead, Black & Co. have sold their elevator on Hardisty St., Fort William, Ont., to J. L. Davidson. The price is stated as $50,000.

The Port Arthur Elevator Co.'s elevator A was inoperative for a time during Nov., on account of the blowing out of a cylinder in the engine room, Nov. 4.

J. Wilson, C.P.R. agent at Claresholm, Alta., was fined $10 and costs, Nov. 22, under the provisions of the Manitoba Grain Act, for failing to place cars when ordered. It is said that an appeal may be entered

Senator Jones, on his recent return to Toronto after a trip along the G.T.P.R. route, said that he counted 45 elevators in operation between Wainwright and Winnipeg, in addition to a number in course of erection.

A scene consisting of the loading of a vessel from an elevator, photographed at Fort William, Ont., has been reproduced in glass and erected as a scenic window in the Canadian Emigration Department office in London, Eng.

The grain growers of Mather, Man., and district, at a recent meeting, endorsed the action of the Grain Growers' Association regarding the Government ownership of all grain storage and handling facilities, both interior and terminal.

The H. D. Metcalfe Grain Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $50,000 and office at Winnipeg, to carry on a general grain business, and to acquire and operate grain elevators in connection therewith.

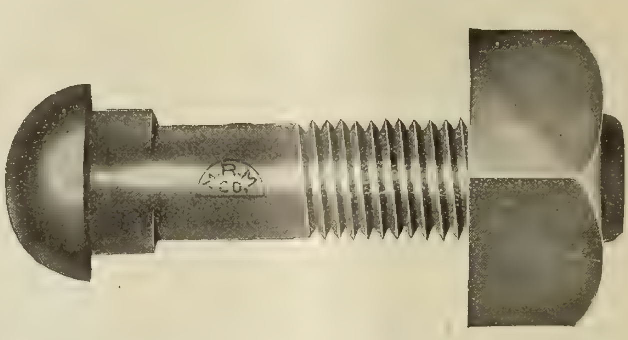
The Provincial Elevator Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $50,000 and office at Winnipeg, to own and operate grain elevators and warehouses, etc. The provisional directors are: G. D. Minty, C. S. Tupper, H. W. Hollis, C. A. Allen, and W. F. L. Edwards, Winnipeg.

The Pembina Farmers' Elevator Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $10,000 and office at Manitou, Man., to build, acquire and operate elevators, grain warehouses, etc. The provisional directors are: J. S. Miller, J. Crane, J. Tait, M. Young and L. Armstrong, Manitou, Man.

Representatives of the Scottish Co-operative Wholesale Society recently made a trip over the G.T. Pacific Ry., for the purpose, it is said, of selecting sites for the construction of elevators. It was also reported that prior to leaving for Great Britain, they let contracts for the construction of six elevators along the G.T.P.R. in Manitoba.

The conference of the Premiers of Manitoba, Saskatchewan and Alberta, and representatives of the various farmers' institutions in the three provinces, which was to have been held Nov. 9, for the purpose of discussing the question of Government ownership of elevators, and other matters incidental thereto, was postponed to Nov. 24.

The Notre Dame de Lourdes Farmers' Elevator Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $7,500, and office at Notre Dame de Lourdes, Man., to construct and operate elevators, etc., in Manitoba. The provisional directors are: J. Bodin, P. Bozin, C. Domp-



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WE CAN SUPPLY PROMPTLY ALL SIZES FOR ANY WEIGHT OF RAIL.

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NO VALVES
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REQUIRES NO ATTENTION DURING USE.

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LIGHTS OVER 1,000 FEET.

FITTED TO DREDGES AND STEAM SHOVELS.

THE ALEXANDER MILBURN CO.
BALTIMORE, MD., U.S.A.

nier, J. Comte, N. Weicher, Notre Dame de Lourdes, Man.

The Thunder Bay Elevator Co., recently organized at Winnipeg, is reported to have entered into an agreement with Port Arthur, Ont., to erect an elevator there with a capacity of 1,500,000 bush., at a cost of about $500,000. Those mentioned as interested in the matter are: W. McWilliams, N. Bawlf and C. B. Piper, the principal stockholders in the Empire Elevator Co., which operates at Fort William.

The Hartney Flour Milling Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $40,000 and office at Hartney, Man., with power, among other things, to acquire, build and operate grain elevators, warehouses, etc. The provisional directors are: W. H. B. Hill, R. Shore, J. Hunter, W. C. Robinson, A. H. Sutherland, J. R. Scharf, Hartney; W. Robson and J. E. Marples, Delau, Man.

The Central Grain Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $199,000, and office at Winnipeg, Man., to carry on a general grain business, and in connection therewith to build and deal in elevators, warehouses, etc., and to acquire and operate steam and other vessels, and all means of transportation incidental to such business. The provisional directors are: E. E. Hall, D. Morrison, C. J. McFall, C. S. Blanchard, and S. M. Battram, Winnipeg.

Elevators are reported to be in course of erection at Moose Jaw, Sask., for the Rex Fruit Co.; at Beatty, Sask., for A. McMichael; at Elstow, for the Canadian Elevator Co., and the Winnipeg Elevator Co.; at Grassy Lake, Sask., for the Medicine Hat Milling Co.; at Estevan, Sask., for the Estevan Farmers' Elevator and Trading Co.; one each at Taber, Gleichen and Killam, Alta., for the Alberta Pacific Elevator Co.; near Lethbridge, Alta., for the Sunny Belt Grain Co., and one at Vermillion, Alta.

The Grand Trunk Pacific Elevator Co.'s elevator at Tiffin, Ont., was recently opened for business, and received its first cargo of grain, of 220,000 bush., from the Farrar Transportation Co.'s ss. Collingwood, Nov. 5. The construction of this elevator, which has a capacity of 2,000,000 bush., was commenced in 1907. It is located on Sturgeon Bay, about a mile east of Midland, and is constructed of steel and concrete. There are 72 cylindrical storage bins, covering a space of 288 by 144 ft. There are two marine legs operated through movable towers. The scale on the weighing floor has a capacity of 400 bush. The entire plant is operated by electricity supplied by alternating current generators of 1,200 h.p.

The contract for the erection of an elevator, with a capacity of 4,000,000 bush., at Fort William Ont., for the G.T. Pacific Ry., was awarded recently to the Canadian Stewart Co., Montreal, and it is said that construction preparations will be undertaken immediately. This elevator will be the first of a series of similar ones to be erected at Fort William for the G.T.P.R., and was designed by the John S. Metcalf Co., Chicago, Ill., who will superintend the construction. The total plant when completed will have a maximum storage capacity of 40,000,000 bush.; an intake capacity of 1,000 cars in 10 hours, and an output to vessels of 400,000 bush. an hour. The elevator system of the G.T.P.R. is operated by the Grand Trunk Pacific Terminal Elevator Co.

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Grand Trunk Pacific Elevator at Tiffin.

The 2,000,000 bushel fireproof elevator which has recently been opened for operation at the new harbor of Tiffin, near Midland, Ont., is the property of the Grand Trunk Pacific Terminal Elevator Co., Ltd., a subsidiary corporation of the G.T. Pacific Ry. Co., and will be operated as a railway elevator, following the policy of the G.T.R. in the operation of its elevators at Montreal, Depot Harbor, Ont., and Portland, Me.

The elevator consists of four interworking parts—the marine towers for unloading of lake vessels, the storage house for storage of grain, the working house for loading it into railway cars, and the power plant for the supply of electric power to the various portions of the equipment. The two marine towers are of the movable type, built of structural steel, with concrete floors and roofs. Each is equipped with a marine leg with an elevating capacity of 20,000 bush. an hour on the dip, a 400 bush. scale, and a lofter leg for elevation of the grain from the scale to the distributing belts above the storage house. We are informed that this is the only Canadian elevator with two movable marine towers, and it will be able to unload, with both legs simultaneously, any lake vessel, regardless of the spacing of her hatches, whether of the modern type with all hatches spaced in multiples of 12 ft., or of the older type, with irregular spacing. The large capacity of the marine legs, the fact that they can operate in any freight vessel, and that the moving towers do not necessitate delay to either leg by the shifting of the boat in accordance with the requirements of the other, will, it is claimed, make the elevator superior to any in Canada in its ability to unload quickly.

The storage house covers about an acre of ground, and has a storage capacity of 2,000,000 bush. The bins are of reinforced concrete, there being 32 cylindrical bins, 33 ft. inside diameter, and 31 interspace bins. A unique system of spouting from the moving marine towers enables the streams of grain from the towers to be diverted from belt to belt or from bin to bin without stopping the flow.

The working house is built of reinforced concrete, with a structural steel cupola. It has small storage capacity—about 150,000 bush.—as its principal use is for loading of railway cars. There are two loading tracks, one on either side of the working house, each equipped with four car-loading spouts. These car-loading spouts receive from four 2,000 bush. scale hoppers, on 120,000 lbs. hopper scales, located in the cupola, the scales being of large size so that they will be able to take a maximum carload of wheat under any probable requirements for as far in the future as railway prophets are at present willing to foretell. Each shipping scale is filled, through a garner above it, by a shipping leg with a capacity of 15,000 bush. an hour. The working house will be able to load from 250 to 300 cars in a working day of 10 hours. A car puller, capable of handling 25 loaded cars, is provided. Particular attention has been paid to the arrangement of the tracks for empty and loaded cars, and the facilities in this respect will be unexcelled.

The power plant is equipped with one 500 k.w. and one 300 k.w. Westinghouse-Parsons steam turbine with electric generator, and all of the machinery throughout the elevator is driven by electric motors, of which there are 17. Four 250 h.p. vertical tubular boilers, operating at 160 lbs. pressure, furnish the steam supply for these turbines.

A concrete wharf 730 ft long, and of such depth as to provide for the possibility of 25 ft. of water in the slip at some future date, is an important portion of the work.

The elevator is designed for future extensions, to include a third marine tower, and 8,000,000 bush. of storage capacity, making the maximum total capacity of the elevator 10,000,000 bush. One marine tower has been in operation since the first week in November when the s.s. Collingwood was the first vessel to be unloaded. It is anticipated that both towers will be ready to operate before the close of navigation of this year. All parts of the structures are absolutely fireproof, and exceedingly low insurance rates have been granted by the underwriters, so that shippers may be assured of rapidity in handling and safety in storage. A large amount of work was done by the Dominion Government in dredging a 21 ft. channel to the new slip from the deeper portion of Midland Harbor. The cost of the elevator plan is said to be in the neighborhood of $1,000,000.00. The elevator was designed and constructed throughout by John S. Metcalf Co., of Midland, Ont., and Chicago, Ill., under directions from F. W. Morse, Vice-President and General Manager G.T.P. Ry.

LAUNCH OF THE NORTHERN NAVIGATION CO.'S S.S. HAMONIC, NOV. 26.

MARINE DEPARTMENT.

Prince Rupert Harbor Entrance.

Regarding the recent press reports as to the alleged dangerous condition of the proposed entrance via Brown Passage to Prince Rupert harbor, referred to in our Nov. issue, the Prince Rupert Empire says: "Strange, is it not, that steamships daily arrive at and depart from Prince Rupert by sea without having passed through Brown Passage at all? Will it not be equally strange if steamships should have to do so in the future? Brown Passage separates Dundas Islands from Stephens Island; the latter lies southwest of Digby Island which forms the western shelter of Prince, Rupert harbor, and the former lies west of Port Simpson. Port Simpson is 37 miles from Prince Rupert by the route taken by ocean-going steamships, so if Brown Passage is dangerous for ocean-going vessels going west through Dixon entrance, they need only go north to Port Simpson before taking their westerly course. All of which seems simple to mariners, seeing that the course is well known to them to be wholly free from obstructions of any kind. Even if this 37 miles were wholly lost in going from Prince Rupert to Chinese or Japanese ports, the distance would yet be shorter by over 400 miles than is the distance between Vancouver and the same ports."

The press reports above referred to are emphatically contradicted by Lt.-Col. W. P. Anderson, Chief Engineer of the Department of Marine, etc., who was on board the Egeria in October, and saw the Captain's plans of the survey of the passage. There are reefs on each side of the passage, but the passage itself is clear for a width of between two and three miles. Stenhouse shoal and Hanmer rocks mark the northern limit of clear water and the north breaker, which shows well above the water, is the southern boundary of the clear passage. It is said that when these points have been marked by lights, there will not be the slightest difficulty or danger in entering through that approach. A gas buoy has already been moored on Stenhouse shoal, just outside of the passage; with that aid alone and with the north breaker showing, the largest sized vessel can go through in perfect safety, day or night. It is the Chief Engineer's opinion that Brown passage presents as clear an approach as any vessel need desire.

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Notices to Mariners.

The Dominion Department of Marine has issued the following notices:

No. 100. Oct. 24.—252. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Cap à la Roche, change in position of gas buoy. 253. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Lake St. Peter, gas buoys established. 254. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Pouillier des Trois Bonées, gas buoy established. 255. Quebec, River St. Lawrence, chart, Ste. Croix to St. Antoine, issued.

No. 101. Oct. 30.—255. Ontario, Great and River St. Lawrence, dates to which Lakes lights will be kept in operation.

No. 102. Oct. 30.—256. New Brunswick, south coast, Bay of Fundy, Lepreau Bay, Cranberry Point, bell buoy established. 257. New Brunswick, St. John River, Grand Lake, McMann Point, light improved. 258. Nova Scotia, St. Mary River, dredging. 259. Nova Scotia, Cape Breton Island, east coast, Sydney harbor, Lloyd Cove, telegraph cables, caution. 260. Prince Ed-

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NIAGARA FALLS, CANADA.

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OPEN THE YEAR ROUND

THE ONLY HOTEL THAT COMMANDS AN UNRIVALLED VIEW OF BOTH FALLS

HOW TO REACH THE CLIFTON HOTEL

Arriving on Grand Trunk Railway or Wabash Rd., at Niagara Falls, Ont. Hotel bus meets all trains or take trolley to hotel—7 minutes.

Arriving on Michigan Central Rd., Canadian Pacific Railway, at Victoria Park station—Hotel bus meets all trains, only three minutes' walk from station to hotel.

International Railway (trolleys), connecting with Niagara Navigation Co. steamers at Queenston, to or from Toronto, pass the door.

IMPORTANT

Guests coming to the Hotel should see to it that they are taken to The Clifton Hotel, CANADIAN SIDE, and also that their mail is addressed "Care of The Clifton Hotel, Niagara Falls, CANADA." To insure prompt delivery, don't forget to make CANADA plain in the address.

C.P.R. LANDS

THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	$ 8.00 to $15.00	per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00	per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00	" "
Map No. 5—South-Western Alberta	8.00 to 15.00	per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00	per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00 to 25.00	per acre.

All prices are subject to change without notice

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

	at	per acre, cash payment	first year's interest	and nine instalments of
160 Acres	$ 8.00	$191.70	$65.28	$160.00
"	9.00	215.70	73.46	180.00
"	10.00	239.70	81.62	200.00
"	11.00	263.60	89.78	220.00
"	12.00	287.60	97.96	240.00
"	13.00	311.55	106.10	260.00
"	14.00	335.60	114.32	280.00
"	15.00	359.50	122 44	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

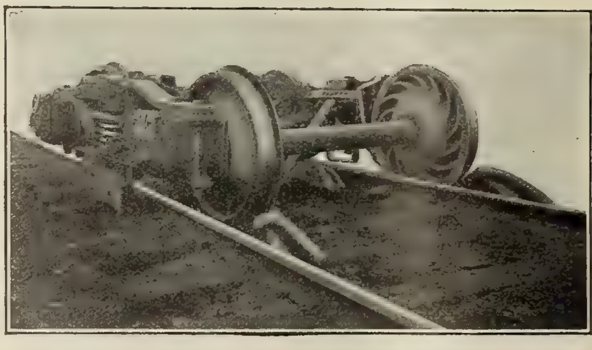
F. T. GRIFFIN, Land Commissioner, Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

The Alexander Car Replacer



60,000 PAIRS IN USE.

Manufactured at

Montreal, Que., and

Scranton, Pa.,

of Pressed Steel Plate, and guaranteed to re-rail heaviest equipment.

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ward Island, south coast, Hillsborough Bay, Haszard Point, daymark on front range lighthouse.

No. 103. Oct. 31.—261. Ontario Lighthouse Division, Quebec, Ottawa River, north shore, Way channel and Besserer crossing ranges, sheds at bases of light poles. 262. Ontario, Georgian Bay, east coast, Point au Baril, new back range light tower. 263. United States of America, River St. Mary, middle Neebish Channel partly closed, south half available.

No. 104. Nov. 5.—264. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, change in position of Batiscan range lights.

No. 105. Nov. 6.—265. Quebec, River St. Lawrence, Bicquette Island, change in fog alarm.

No. 106. Nov. 7.—266. Nova Scotia, Cape Breton Island, Cape North, fog alarm established.

No. 107. Nov. 10.—267. Ontario, Lake Ontario, Salmon Point, light improved. 268. St. Clair River, new aids for up and down channels in St. Clair River at St. Clair. 269. Ontario, Lake Huron, north channel, Blind River, color of Eddy wharves range lights. 270. United States of America, St. Lawrence River, Cape Vincent, rock located.

No. 108. Nov. 12.—271. Nova Scotia, south coast, off Musquodoboit shoal, whistling buoy established, off Harbor Island, buoy established. 272. Nova Scotia, south coast, Spry Bay, buoys established. 273. Nova Scotia, south coast, off Fishery Point shoal, bell buoy established 274. Nova Scotia, south coast, Lockwood rock, whistling buoy established.

No. 109. Nov. 13.—275. Nova Scotia, west coast, off Cape Fourchu, change in position of submarine fog bell. 276. England, south coast, the Lizard, fog signal altered. 277. England, east coast, east Goodwin and Gull light vessels, alteration in lights, fog signal. 278. Scotland, north coast, Pentland Firth, Dunnet Head light, altered in character.

No. 110. Nov. 16.—279. British Columbia, Vancouver Island, south coast, Juan de Fuca Strait, Trial Island, permanent light. 280. British Columbia, Strait of Georgia, sand heads of Fraser River, gas buoy changed. 281. British Columbia, Burrard Inlet, First Narrows, west entrance, gas-lighted beacon established. 282. British Columbia, Prince Rupert entrance, Coast Island, arc of visibility of front light increased, dark sector over Kitson bank.

No. 111. Nov. 18.—283. British Columbia, Burrard Inlet, Vancouver, storm signal. 284. British Columbia, Vancouver Island, east coast, Nanaimo harbor, Gallows Point beacon, change in color of light. 285. British Columbia, Seaforth channel, Dall Patch, gas and whistling buoy established. 286. British Columbia, Dixon entrance, Brown passage, description of Stenhouse shoal, rock off Connell Islands. 287. Japan, province of Nemoro, Hokkaido, Noshappu-Zaki light station, fog siren established.

No. 112. Nov. 20.—288. Lake Superior, north shore, local magnetic disturbance. 289. Lake Winnipeg, north end, Nelson River mouth, Warren Landing, range lights established.

No. 113. Nov. 23.—290. Ontario, Lake Huron, Goderich, back range light temporarily extinguished, caution.

The following notices have been issued by the U.S. Hydrographic Department:

No. 45. Nov. 7.—2001. Lake Ontario, southern shore, Charlotte harbor, wreck removed. 2002. St. Lawrence River, Cape Vincent, rock located.

Atlantic and Pacific Ocean Marine.

Capt. Vipond, of the Allan Line s.s. Virginian, and commodore of the Allan fleet, will, it is reported, retire from the service shortly.

The Allan Line s.s. Ionian, outward bound, Nov. 2, could not land her pilot at Father Point, as is customary, on account of the rough weather, so he was taken across to Scotland.

Capt. W. Jennings, R.N.R., who was for a number of years in the service of the White Star Line as commander of some of its principal vessels, died recently at Tunbridge Wells, Eng., aged 92.

Sir Joseph Ward, Premier of New Zealand, is urging the New Zealand Government to subsidize a steamship line with Canada, principally to prevent the frozen mutton trade being monopolized by the Argentine vessels.

R. M. Coulter, Deputy Postmaster-General of Canada, arrived in Sydney, N.S.W., early in Nov., for the purpose of negotiating with the Commonwealth Government as to the position Australia will assume towards the proposed "all-red" service. It is said that prior to returning to Canada, Mr. Coulter will visit New Zealand, South Africa and Great Britain, in connection with the same matter.

The berths at West St. John, N.B., have been allotted for the winter season as follows: Nos. 1, 2 and 3 to the C.P.R., 4 to the Donaldson Line, and 6 to the Allan Line. It was stipulated that the companies bind themselves to pay $10 a day for each vessel lying at the wharf, in addition to the usual tariff fees. This was objected to by the companies concerned, and the matter was referred back to the city council.

Capt. Riley, Superintendent of Pilots, held a preliminary enquiry into the causes of the stranding of the Elder-Dempster Co.'s s.s. Ashanti on Madam's Reef, near Quebec, on Oct. 26, in the Wreck Commissioner's Court, Montreal, Nov. 1. It will be decided later whether any further enquiry is necessary. The evidence showed that at the time she struck; the Ashanti was on half speed, i.e., about 5 knots an hour.

The fogs overhanging the St. Lawrence Gulf and River during the early part of Nov. caused considerable disorganization amongst the vessels, both outward and inward. The Allan Line s.s. Hesperian is reported to have taken 7 days to steam from Quebec to Montreal. The only vessels which do not seem to have been hindered to any extent were the C.P.R. Empresses, and it was hinted that special arrangements were made for the lifting of the fog merely to let these boats make records.

The International Mercantile Marine Co., which includes the White Star Line, will, it is reported, expend in new construction, during the next three years, about $23,000,000, all of which is to come out of earnings. The Laurentic and Megantic, intended for the Canadian trade, are the first of a series of new vessels of the most modern type. The first-named will make her maiden trip to New York shortly, and the second has been launched. The Olympic and Titanic are to follow these two, and are intended for the Southampton-New York route.

G. M. Bosworth, Fourth Vice-President, C.P.R., on his return to Canada from Great Britain recently, announced that arrangements had been made with the Hamburg-American Steamship Co. to operate jointly with the C.P.R. a first-class steamship line between Canadian ports and Hamburg, Rotterdam and Bremen. The first sailing will probably take place at the commencement of the St. Lawrence navigation season in 1909, and continue weekly during April, May and June, and fortnightly for the remainder of the season.

Judgment was delivered recently in the Board of Trade enquiry, at Liverpool, Eng., into the stranding of the Dominion Line s.s. Southwark, during a fog, on the Labrador coast, Aug. 11. The Court found that the stranding and consequent damage were caused by the master, J. O. Williams, not having ascertained that the vessel had overrun her distance, and in attempting to turn her round with a broad sweep of about three miles towards the shore, when she was much nearer the land than he supposed her to be. The Court, however, did not deal with Capt. Williams' certificate. With the above exception the Court found that the steamer was properly navigated and equipped. It was further found that the fog signals at Greenly Island and Point Amour were not sounded before the Southwark struck. In the course of the evidence, as to the lights and fog signals, the death of the lighthouse keeper at Greenly Island, who, it has been presumed, committed suicide, was commented on.

Maritime Provinces and Newfoundland.

D. Jenkins has been appointed U.S. Consul at St. Pierre, Miquelon.

The St. John, N.B., Seamen's Association has opened its recently erected seamen's home there.

Capt. T. Douglas, of Halifax, N.S., owner of the barque Osberga, died in New York, Nov. 15, aged 57.

Capt. J. R. Birkland, harbormaster at Barbados, W.I., and formerly of Halifax, died at Barbados recently.

The steam tugs Calluna and Lord Wolseley, of St. John, N.B., ran ashore at Seal Rocks, on the west of Pictou Island, Nov. 10.

The municipality of Richmond, N.S., will receive tenders Jan. 1, 1909, for the operating of a steam ferry service across Lennox Passage, Richmond county.

Two sealing steamers for A. J. Harvey, St. John's, Nfld., were launched in Great Britain during Nov., and it is expected they will sail for St. John's Dec. 27.

J. McGill, Shelburne, N.S., is constructing a schooner of 100 tons register for the West Indies trade. Her dimensions are: Length, 100 ft.; breadth, 24 ft.; depth, 9.8 ft.

A schooner named Watanga was launched at Lunenburg, N.S., recently, her dimensions being: Length, 116 ft.; breadth, 25.8 ft.; depth, 10.8 ft.; tonnage, 99 register.

The U.S. Consul at St. John, N.B., reports the value of exports from St. John to the U.S., for the quarter ended Sept. 30, as $589,137.83, against $849,938.36 for the same period 1907.

The schooner Lorna Doone, which arrived at North Sydney, N.S., Nov. 4, reported that Capt. Roberts, of Twillingate, Nfld., had been washed overboard near Cape Sable, Nov. 1, during a gale.

T. E. Kenney, President of the Royal Bank of Canada, who died recently, was interested in the shipping and shipbuilding business, at one time carried on in various parts of Nova Scotia by Putnam Bros.

The British Admiralty surveying ship Ellinor, which has been engaged during the summer on survey work on the north-east coast of Newfoundland, has arrived at Halifax, N.S., where she has been berthed for the winter.

The Windsor, N.S., schooner Calabria was driven ashore at Summerside, P.E.I., Nov. 1. She was built at Parrsboro, N.S., in 1881, her dimensions being: Length, 154.4 ft.; breadth, 36.5 ft.; depth, 16.2 ft.; tonnage, 451 register.

The salvage operations on the s.s. Turret Bell near St. Peters, P.E.I., are proceeding slowly, the wreckers having been seriously interfered with by bad weather. The vessel has been removed seaward about 100 ft., and is reported to be lying in a good position.

The St. John schooner Eric was wrecked near Cape Nanset, Oct. 31, during a storm. The crew was taken off by the steam trawler Conqueror. The Eric was built at St. John in 1890, her dimensions being: Length, 94.1 ft.; breadth, 27.1 ft.; depth, 7.5 ft.; tonnage, 119 register.

The Dominion Department of Marine will receive tenders to Dec. 10 for the construction of a twin screw steel steamer for hydrographic service on the Atlantic coast. The dimensions of the required vessel are to be: Length, over all, 173½ ft.; breadth of beam, moulded, 29 ft.; depth, 15½ ft.

The schooner Regina B., registered at Port Hawkesbury, N.S., was run down by the s.s. John Irwin recently. She sank almost immediately, the crew being saved. She was built at Summerside, N.S., in 1881, her dimensions being: Length, 77.8 ft.; breadth, 22.4 ft.; depth, 8.6 ft.; tonnage, 81 register.

The hull of the s.s. Hugh D., which has been constructed at J. McGill's yard at Shelburne, N.S., was launched Nov. 5, and towed to Halifax, where her machinery will be installed. Her dimensions are: Length, 88.6 ft.; breadth, 18 ft.; depth of hold, 8 ft. She is owned by H. Cann & Son, Yarmouth, N.S., and will be used for towing and general freighting business.

Judgment has been delivered in the matter of the Halifax Graving Dock Co. against the owners of the Italian barque Affezione, under garnishee proceedings, by which it was declared that there was $2,596.81 in the hands of S. Cunard & Co., who garnisheed, and awards $100 to J. Strachan, average adjuster, and $2,000 with interest to E. F. Williams. The Affezione, which was docked at Halifax for repairs Nov. 9, 1907, has been taken over by G. E. M. Lewis, Truro, N.S., and placed on the Canadian register, under the name of Shanks.

The Plant Steamship Line is reported to have chartered the s.s. Lady Sybil from the Magdalen Islands Steamship Co., for which she was built in 1907. She has been operated during the summer by the Interprovincial Navigation Co. between Campbellton, N.B., and Gaspe ports, on the Government mail service, and replaced the s.s. Lady Eileen, which was wrecked in the Baie des Chaleurs, June 7. The Lady Sybil will be placed on the Halifax-Boston route for the winter, the Halifax and A. W. Perry being transferred to the West Indies service.

The Cape Breton Dredging Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $100,000 and office at Toronto, to carry on a general dredging, construction and towing business; to purchase the plant of the Canada Construction and Dredging Co., consisting of the dredge Edmund Hall No. 1, the tug Argyle, and two scows; to purchase or acquire the dredge Degnon and two scows; and to purchase or acquire the tug Acadia. The provisional directors are: J. B. Bartram, Toronto; D. Murphy, Ottawa; and V. T. Bartram, Purchasing Agent, Temiskaming and Northern Ontario Ry. North Bay, Ont.

◆

Province of Quebec Marine.

The Quebec Steamship Co. paid its 61st half-yearly dividend Nov. 2, at the rate of 6% per annum.

The name of the barge Indiana, no 74,254, registered at Quebec, has been changed by order-in-council to L.P.

The Quebec Harbor Commissioners are urging the Government to undertake the construction of a dry dock there.

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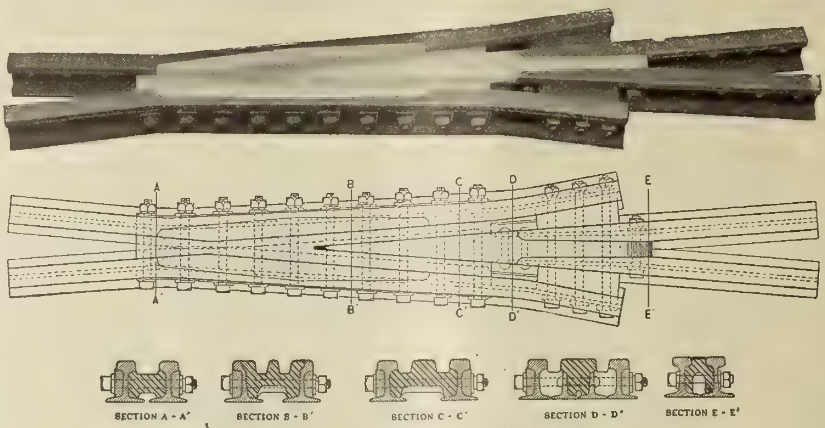

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TORONTO, CANADA

The Leyland Steamship Line has instructed its agent at Montreal to dispose of its sheds, situated near the Victoria pier.

The sheathing of the Quebec and Levis Ferry Co.'s s.s. Henry R. James having been completed, she was recently taken to Levis to be fitted up for service.

The second foundation crib work section for the west side of the breakwater extension in Quebec harbor was sunk there recently; no further work of this nature will be undertaken this season.

The steamboat Vigilant, J. M. Cornwall, master, was seized Nov. 2 at Cote St. Paul, Que., at the instance of D. Paquette, on a claim for pilotage dues. Bail was subsequently given and the vessel released.

The Crystal Ice Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of $100,000 and office at Montreal, with power, among other things, to own and operate warehouses, wharves, tugs, boats, etc., in connection with its business.

The s.s. King Edward, operating between Quebec and north shore ports, ran aground at English Bay, Anticosti Island, during a heavy gale, Nov. 16. The passengers and crew were taken ashore in lifeboats. The vessel, which is owned by Holliday Bros., Quebec, is probably a total loss.

The floating crane barge, which, while being towed to Montreal from Barrow, Eng., broke loose during a storm, and drifted to Stornoway, Scotland, has been taken back to Barrow, where it will be kept for the winter. Another attempt will be made to tow it across the Atlantic in the spring.

The Quebec schooner Blanche Alma was driven ashore at Point des Monts, Que., recently during a storm, and was broken up; very little of the cargo was saved. She was built at Ste. Anne, Que., in 1890, her dimensions being: Length, 78.2 ft.; breadth, 22.8 ft.; depth, 8.3 ft.; tonnage, 87 register.

The C.P.R. third annual trip, to which were invited a number of Quebec officials, etc., with whom the steamship department is brought into contact during the summer season, took place Nov. 6. The party travelled from Quebec to Montreal in special cars, and returned to Quebec on the C.P.R. s.s. Lake Manitoba.

The Department of Marine announces that all Canadian lights in the St. Lawrence River will be kept in operation as long as navigation is open, and all gas buoys kept at their stations as long as ice conditions permit. When it is necessary to remove the buoys before the close of navigation, spar markers will be laid where possible.

Bouchard Bros., Quebec, have recently purchased the s.s. Restigouche, formerly known as Rathlin. She was built at Glasgow, Scotland, in 1877; her dimensions being: Length, 229 ft.; breadth, 31 ft.; depth, 16 ft.; tonnage, 945 gross. She has engines with cylinders 26 and 52 ins. diar., by 57 ins. stroke, and was fitted with a new main boiler in 1888.

The Dominion Department of Marine has prepared specifications for a vessel to be constructed for the purpose of attending to the buoying system of the St. Lawrence ship channel, to replace the Shamrock, now in use for that purpose. It is stated that immediately an appropriation is made, the work of construction will be commenced at the Sorel yard.

The plans for the further improvement of the harbor facilities at Montreal include the erection of an electric power plant for the production and distribution of power for all purposes in the harbor; the construction of a dry dock of suitable capacity for any vessels which may arrive in Montreal; and the erection of two cranes at each of the newly erected sheds. It is said that the Harbor Commissioners' jurisdiction is to be extended to cover the whole front from near Lachine to Bout de l'Ile.

Following is a comparison of the chief commodities exported from Montreal during Oct., 1908 and 1907:

	1908.	1907.
Wheat, bush	22,580,412	17,631,735
Corn, bush	242,703	4,131,574
Peas, bush	150,270	122,482
Oats, bush	101,687	3,847,839
Barley, bush	917,625	789,720
Rye, bush	112,312	72,460
Buckwheat, bush	16,683	1,955
Flaxseed, bush	621,022	1,183,029
Flour, brls	513,946	689,109
Meal, brls	26,508	54,244
Eggs, cases	1,465	11,522
Butter, kegs	87,683	64,362
Lard, brls	332,200	129,328
Meats, pkgs	99,363	129,238
Cattle	62 917	76,488

Ontario and the Great Lakes.

T. W. Trotter has been appointed Government wharfinger at Echo Bay, Ont.

Capt. A. J. Young, a well-known mariner on the lakes, and a native of Kingston, died at Detroit, Mich., Nov. 4, aged 61.

G. Murray, a well-known lake captain, who retired about 10 years ago, died at Kingston recently, aged 86.

The Midland Navigation Co.'s s.s. Midland King ran aground near Detour, Mich., Nov. 1, and was subsequently released by the tug General.

The light station on the southeastern side of Grand Island, Lake Superior, at the entrance to the harbor, has been discontinued for the winter season.

It is reported that the first masonry repairs, since their construction in 1834, will shortly be made to the Rideau Canal locks at Ottawa, at a cost of $19,000.

The schooner Kingston had to put back to Kingston Nov. 5, having had her foremast and rigging carried away. She has been laid up there for the winter.

The name of the O'Connor Steamboat and Hotel Co., Ltd., has been changed by an order under the provisions of the Ontario Companies Act to Temagami Steamboat and Hotel Co., Ltd.

Speaking on the Georgian Bay canal project recently, Sir Wilfrid Laurier said that construction work would probably be commenced immediately on the completion of the National Transcontinental Ry.

The Canadian Lakes Transportation Co.'s steamboat Corunna sailed from Toronto, Nov. 14, on her last trip of the season to the head of the lakes. On her return to Toronto from Kingston, she will be berthed for the winter.

During Oct. it was reported that 3,707,219 bush. of grain had been transhipped at Kingston, making 10,500,000 for the season to that date. It was estimated that about 13,000,000 bush. would be the total for the season, against 15,000,000 in 1907.

The Montreal Transportation Co.'s steamboat Rosemount ran aground in making the entrance to the new West Neebish channel, Sault Ste. Marie, Nov. 10. After lightering about 100,000 bush. of grain, she was released apparently uninjured, Nov. 11.

The Mutual Steamship Co.'s steamboat Canadian, which ran ashore near Detour, Mich., Oct. 31, was taken to Sault Ste. Marie, Ont., where temporary repairs were made, and her cargo lightered. She is in such a condition that she will not be in service again this season.

The following Government canal employes have been awarded the Imperial service medal, on their retirement, for long and meritorious service: J. Denneny, foreman, Welland Canal; R. McCreary, lock master, Rideau Canal; and J. E. Scott, foreman, Welland Canal.

The Toronto Board of Control has approved of the Works Committee's recommendation to build a dredge at a cost of $76,000. A recommendation to purchase another tug for $10,000, and the question of repairs to the city's sand pump no. 1, were also discussed recently.

At a recent discussion at the Engineers' Club of Toronto, W. J. Fuller, assistant to J. G. Sing, Dominion Government Engineer, Toronto, advocated the extension of Toronto harbor to include Ashbridge's Bay, and the construction of additional dockage facilities, covering the whole of the bay.

The U.S. lake survey reports for Oct. give the levels of the Great Lakes in feet above tidewater as follows: Superior, 602.69; Michigan and Huron, 580.86; Erie, 572.31; Ontario, 246.44. Since the previous month, Superior has fallen 1¼ ins.; Michigan and Huron, 4¾ ins.; Erie, 5 ins.; and Ontario, 8½ ins.

The Dominion Department of Marine has issued a notice that the lighthouse in course of construction about 80 ft. southwest of the Pigeon Island lighthouse obscures the southwest light of that structure. The new tower will be in full operation at the opening of navigation in 1909 and the present light discontinued.

The Western Steamship Co.'s steamboat Wexford, while down bound, struck the south pier at the entrance to the Sault Ste. Marie Canadian canal, Nov. 6, cutting a hole in her starboard side above the water line. Temporary repairs were undertaken and part of her cargo of grain lightered to enable her to proceed on her trip.

The Dominion Transportation Co.'s steamboat Telegram was destroyed by fire near Fitzwilliam Island, Georgian Bay, Nov. 1. She was built at Collingwood in 1885, and was a screw steamer with engine of 35 n.h.p. Her dimensions were: Length, 108 ft.; breadth, 21 ft.; depth, 9 ft.; tonnage, 198 gross, 134 register. The vessel was valued at $20,000,

The Temiskaming Navigation Co.'s steamboat Temiscamingue was destroyed by the explosion of the boiler, near Mattawa, Nov. 10, five persons being killed and several injured. She was built at Temiscamingue, Que., in 1898, and was a screw-driven vessel with engine of 21 n.h.p. Her dimensions were: Length, 133 ft.; breadth, 22.5 ft.; depth, 6.5 ft.; tonnage, 295 gross, 213 register.

The Lemcke Tug Co.'s steam tug W. E. Gladstone, with a scow, broke from its moorings at Lion's Head, Nov. 5, during a storm, and was dashed to pieces. She was built at Collingwood in 1882, and was a screw-driven vessel with engine of 25 n.h.p. Her dimensions were: Length, 72 ft.; breadth, 16 ft.; depth, 6.8 ft.; tonnage, 45 gross, 30 register. She was valued at $4,000, and the scow at $1,500.

The Lake Ontario and Bay of Quinte Steamboat Co., Kingston, it is reported, has awarded a contract for the construction of an additional vessel for its fleet to a Kingston firm. The vessel, it is said, will be mostly of steel, 120 ft. long, with capacity for 520 on the bay and 390 on the lake, and with an average speed of 15 miles an hour. It is intended to have her ready for service early in 1910.

Considerable complaint is being made by U.S. vessel owners and others regarding the delay which frequently occurs at Canadian grain ports at the head of the lakes. It is reported that one of the largest grain carrying vessels on the lakes was detained a full week at Fort William, and had to go to seven elevators to make up her cargo.

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Montreal—Quebec—Liverpool
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(Bristol and Antwerp)

LEYLAND LINE
Boston—Liverpool
Sailing from Boston Wednesdays.

RED STAR LINE
New York—Antwerp—Paris
Sailing from New York Wednesdays.

WHITE STAR LINE
New York—Liverpool—Queenstown—
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N.Y.—Plymouth—Cherbourg—Southampton
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Several vessels are reported to have sailed with short cargoes on this account.

Grain receipts at Fort William by C.P.R., Sept. 1 to Oct 31, wheat, 11,552,883.10 bush.; oats, 1,589,200.03; barley, 397,182.05; flax, 195,568.09. Total, 13,734,833.54; at Port Arthur by C.N.R., wheat, 7,113,712.00; oats, 828,184.14; barley, 597,739.19; flax, 14,349.50. Total, 8,553,984.83. Shipments from Port Arthur for same period, wheat, 13,649,084.40; oats, 1,670,044.00; barley, 388,687.20; flax, 86,323.00.

The C.P.R., in preparation for the close of navigation on the Great Lakes, discontinued, for the winter season, the acceptance of package freight, and flour, west of Moose Jaw, Sask., Nov. 12 and 13 respectively; and east of Moose Jaw, Sask., Nov. 18 and 20 respectively; and from Ontario points westerly, Nov. 24, for shipment by lake and rail. The last sailing from Owen Sound was scheduled for Nov. 30, and from Fort William, Dec. 1.

The Huntsville, Lake of Bays and Lake Simcoe Navigation Co.'s steamboat Iroquois ran aground recently near Spanish Mills, and taking fire was destroyed. The passengers and crew were saved, but everything on board, with the exception of three bags of mail, was lost. The Iroquois was built at Huntsville in 1907, and was a screw-driven vessel with engine of 28 n.h.p. Her dimensions were: Length, 118.5 ft.; breadth, 23 ft.; depth, 7.5 ft.; tonnage, 307 gross, 198 register.

The Quinte Navigation Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of $40,000 and office at Picton, Ont., to own, construct and operate steam vessels for the purpose of trade in Ontario, and to own, build or acquire docks, wharves, warehouses, etc., and to carry on a general forwarding and passenger business. The provisional directors are: D. B. Christie, A. Leslie, Picton; M. J. McFaul, F. Brennan, Deseronto; and H. Dempsey, Ameliasburgh, Ont.

The repairs to the Cornwall Canal above lock 18, where the bank was carried away June 23, causing the collapse of the Ottawa and New York Ry. bridge, are practically completed. A solid concrete wall has been constructed, 260 ft. long by 20 ft. wide at the bottom, and 3 ft. at the top, and 39 ft. from bottom to top. It is to be reinforced on the outside by a bank of heavy ballast. A concrete pier, 23 ft. diameter, and rising 24 ft. above the canal, has been constructed to carry the railway and swing bridge.

The Northern Navigation Co.'s new steamship was launched at the company's headquarters, Collingwood, Ont., Nov. 26, being christened Hamonic, by Mrs. H. H. Gildersleeve, the manager's wife, in the presence of a large assemblage, including several G.T.R. officials and visitors from Toronto and elsewhere. Great regret was expressed at H. C. Hammond, President of the N.N. Co., after whom the boat is named, being unable to be present, owing to his serious illness. The Hamonic has been fully described in previous issues.

The Department of Marine announces that all Canadian lights and fog alarms in Lake Superior will be kept in operation until Dec. 10, with the exception of that at Caribou Island, which may be discontinued Dec. 5, subject to weather conditions, or the early closing of navigation. The Canadian lights and fog alarms in Lake Huron, Georgian Bay, Lakes St. Clair, Erie and Ontario, will be kept in operation until Dec. 15, excepting those at Lonely Island, Western Island, and the Red Rock lights in Georgian Bay, which may be discontinued Dec. 10, should navigation close early.

The Dominion Department of Marine has given notice of the provision of an acetylene gas buoy for the most northerly and easterly 18 ft. spot of the detached shoals in the Canadian channel east of the middle ground of the St. Clair River. The U.S. Lighthouse Board has moved the gas buoy from the south point of the main middle ground, at the mouth of Pine River, to 2,900 ft southward, to indicate the southern point of division of the upward and downward channels. A red spar buoy takes the place of the gas buoy removed. The striped buoy 500 ft. north of the newly located gas buoy has been discontinued. The St. Clair middle shoal buoy no. 3, a black spar at the east side of the shoals in the Canadian upbound channel, near Courtright, Ont., has been moved southeasterly, about 250 ft., to mark the extreme easterly edge of the shoal. The northerly division of the two channels is indicated by a striped gas buoy.

Judgment has been delivered in the Kingston Admiralty Court in the cases of the Montreal Transportation Co. against the barge Buck Eye State, and the Atlantic Coast Steamship Co., as owners, and the barge Buck Eye State, against the Montreal Transportation Co., the tug Mary Ellen and its captain, J. Jesmer, in favor of the plaintiffs in the first case, and of the defendants in the second. The Transportation Co. engaged to tow the Buck Eye State from Lachine Point to Port Dalhousie, accidents occurring in the Cornwall Canal at Cornwall, and at Morrisburg, the barge finally being sunk at Iroquois; and it receives $2,458 for salvage work thereon, and was absolved from all liability. The accident was attributed entirely to the tug Mary Ellen, against the owners of which the Atlantic Coast Steamship Co. obtained judgment. F. King, Secretary-Treasurer Dominion Marine Association, Kingston, appeared for the Montreal Transportation Co.

Manitoba, Saskatchewan, Alberta, Etc.

The steamboat Mikado ran aground on a sandbank at Grand Marais, Lake Winnipeg, recently.

The Department of Marine has given notice of the establishment of range lights at Warren Landing, at the mouth of the Nelson River, north end of Lake Winnipeg.

The proposal to reorganize A. Booth & Co. has been rejected by the creditor bankers' committee. It is stated that the banks concerned hold the company's paper for nearly $6,000,000 and that their decision was affected by the statement that in the event of a reorganization, a prosecution under the Anti-Trust laws would be instituted. It is reported that they are willing to accept 35c. on the dollar.

The Canadian Lakes Fishing Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $20,000 and offices at Dauphin, to carry on a general fishery business, and with power to own and operate steam and other vessels in connection with such business, and to carry passengers and freight. The provisional directors are: W. J. Walker, W. W. Aitchison, J. B. Jessop, Chicago, Ill.; E. D. Coffey, Dauphin, Man.; and F. L. Merritt, Winnipegosis, Man.

The Winnipeg and Lake of the Woods Development Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of $100,000 and office at Winnipeg, with power, among other things, to build, or otherwise acquire and operate steam and other vessels, and to carry on the general business of transportation of passengers and freight. The provisional directors are: L. J. Murphy, R. J. Gourlay, G. Williamson, Winnipeg; D. L. Mather, Kenora, Ont.; and H. W. Echlin, Keewatin, Ont.

B.C. and Pacific Coast Marine.

The G.T. Pacific Ry. is reported to be considering the possibility of building another steamer to operate on the Skeena River in connection with its steamboat Distributor.

Capt. J. G. Cox, who died at Victoria Nov. 10, was born at Maitland, N.S., and went to Victoria in 1884. He acted as Lloyds' agent in Victoria for a number of years, and was interested in the sealing industry.

The Vancouver city council has instructed its solicitor to proceed with a claim against the C.P.R. for services rendered and salvage, when the company's s.s. Empress of China sank in the dock there last year.

The C.P.R. s.s. Princess Royal collided with the Japanese s.s. Fluki Maru in Seattle harbor, Wash., during a fog Nov. 9. The Princess Royal was badly damaged and had to transfer her passengers and go into dry dock.

The large dredge purchased by the Dominion Government in Germany is on its way to British Columbia via Cape Horn, and is expected to reach the Fraser River shortly. It will be used on the work of cutting a 30-ft. channel from Millside to the Gulf.

The Vancouver Cruising Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $20,000, to carry on a lumber business, to maintain and operate steam and other vessels, wharves, warehouses, etc., and to conduct a general transportation business.

Commander O. G. V. Spain, Dominion Wreck Commissioner, was in conference with the pilotage committee of the Board of Trade and the agents of the various steamship companies at Victoria recently, in the course of his investigations into the pilotage rates and arrangements on the B.C. coast.

The Newton and Greer Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $25,000, to take over the general ships chandlery business carried on at Victoria by S. R. Newton and J. H. Greer, with power among other things to own and operate steam and other vessels, and to conduct a general transportation business.

The Prince Rupert Construction Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $25,000, with power to carry on the business of contractors for the construction of railways, tramways, etc., and acquire and operate steam and other vessels, wharves, docks, piers, marine railways, etc., and to carry on a general transportation business.

The Western Steamboat Co.'s steamboat Ramona, operating between New Westminster and Chilliwack, was sunk in the Fraser River, Nov. 11. There was no loss of life. The vessel was built at Portland, Ore., in 1896, and was a paddle-wheel steamer, with engine of 9 n.h.p. Her dimensions were. Length 178.2 ft., breadth 25 ft., depth 4.4 ft.; tonnage, 251 gross, 209 register.

The Vancouver Machinery Depot, Ltd., has been incorporated under the B.C. Companies Act, with a capital of $50,000, to take over the business of G. A. Walkem & Co., Vancouver, and to carry on the business of carriers by land and water, ship owners, wharfingers, shipping agents, etc., and to own and operate steam and other vessels for the purposes of the company.

The s.s. Iroquois, operating between Sydney and Nanaimo in connection with the railway service, ran ashore at Sharp's Point, near Nanaimo recently. She was released by the tug William Joliffe and taken to Victoria for examination. The damages were found to be less than anticipated, and the necessary repairs were completed and the route resumed Nov. 7.

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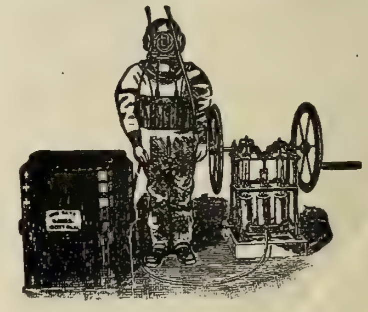

JOHN DATE
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The steamboats plying on the Skeena River are being berthed for the winter season at various points. The Hudson Bay Co.'s vessels, Port Simpson and Hazleton are at Port Simpson and Port Essington respectively; the G.T. Pacific Ry.'s Distributor will winter at Victoria, and the Skeena, owned by Foley, Welch and Stewart, G.T.P.R. contractors, at Prince Rupert.

Following are the officers of the International Navigation and Trading Co. (Kootenay Ry. and Navigation Co.), Spokane, Wash., for the current year: President, E. L. Brown; Vice-President, A. H. MacNeill; Superintendent, P. H. Walsh; Secretary, W. H. Fortier; Treasurer and Auditor, R. C. Morgan. The first three are also directors

The Department of Marine is asking for tenders for the construction of a twin-screw steel cruiser for the fisheries protection service in B.C. waters. The following dimensions are quoted: Length over all, 250 ft; breadth of beam, moulded, 32 ft.; depth from top of keel to top of beams at side, 17 ft. The vessel is required to be delivered at Victoria, B.C., and tenders will be received up to Jan. 15, 1909.

The Mackenzie Steamship Co is reported to have purchased the British s.s. Powhatan, recently lying at Hong Kong. The vessel is described as a steel screw steamer of 4,262 tons gross, 2,789 tons register; length, 354.1 ft.; breadth, 50.3 ft.; depth, 20.3 ft. It is stated that passenger accommodation, etc., has been added at Hong Kong, at a cost of $20,000, and that the vessel will arrive at Victoria early in December.

The C.P.R. s.s. Princess Royal has had her repairs completed at Esquimalt, and is again in service. Her place in the dock was taken by the Japanese s.s. Fukui Maru, with which she was in collision recently. It is estimated that the repairs to the latter vessel will amount to $10,000. New shell plates will be fitted, as well as four beams, three deckplates and two side stringers. An investigation into the causes of the collision has been held in private.

The Boyden Tug Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of $20,000, to purchase from S. F. Mackenzie, Vancouver, the steam tug J. E. Boyden, and with power among other things to own and operate steam and other vessels, wharves, warehouses, etc., and to carry on a general transportation business. The tug J. H. Boyden was built at Seattle, Wash., in 1888, and is a screw-driven vessel with engine of 37 n.h.p. Her dimensions are: length, 84.4 ft.; breadth, 19 ft.; depth, 9.7 ft.; tonnage, 122 gross, 83 register.

The C.P.R. s.s. Princess Charlotte, recently built at Govan, Scotland, for the Vancouver-Seattle route, sailed from the Clyde Nov. 2, and it is anticipated will arrive at Victoria towards the end of December. One of our U.S. contemporaries recently, in giving an abridged description of the vessel, remarked that it was the "first authentic description of her appearing in an American journal." If the term "United States" were used instead of "American," it would possibly be more correct. A very full description of this vessel was given in our Aug. issue.

Various rumors are current on the Pacific coast as to the intentions of the G.T. Pacific Ry. in regard to the provision of a coastwise steamship service. One report states that Foley, Welch & Stewart, G.T.P.R. contractors, are about to acquire two vessels to inaugurate a service between Vancouver and Prince Rupert, and that they would be handed over to the railway company next summer. Other reports are to the effect that the G.T.P.R. was having plans prepared in Great Britain for the construction of two vessels similar to the C.P.R. Princesses, to be ready for the spring of 1910; and reports that the railway company is about to acquire the fleet of the Union Steamship Co. of Vancouver, have also been freely circulated recently. While it is likely in the natural course that the G.T.P.R. will desire to engage in the coastwise trade when the railway is in full operation, there is no official information obtainable as to the correctness or otherwise of these reports.

◆

Proposed Grain Clearing House.

Delays in the loading of grain cargoes at Port Arthur and Fort William, and continued discrepancies in the out-turns of cargoes have led to intense dissatisfaction. Under the present system a vessel is often forced to travel all around one or both of these harbors picking up her load in small lots from various elevators. A large part of a week is sometimes occupied in this way in getting a load. The grain clearing house proposed is intended to obviate this difficulty, by substituting a system of accounting between the various elevators in place of the present method. This clearing house, working possibly under Government supervision, would be able to direct a vessel to one, or at most two elevators, and these elevators would receive credit for the grain loaded, the other elevators in question being charged up with the various grades and quantities delivered. When the scheme was first mooted, it had the approval of all parties, except certain elevator owners, by whom objections were raised regarding questions of responsibility and accounting.

The Dominion Marine Association has succeeded in enlisting the cordial support and approval of the Department of Trade and Commerce, and it is understood that all the officials of the Inspection Department are also strongly in favor of the scheme. The Western Grain Standard Board has also endorsed it, and a number of the elevator owners are in line. With all the parties interested agreeing upon the scheme it is expected that the few objections which have been raised will be readily met, and it is quite possible that before next navigation season opens a clearing house may be in operation.

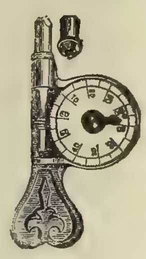
LIST OF STEAM VESSELS REGISTERED IN CANADA DURING OCT., 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry.	Owners.
Ch'y M. Scott.	122,450	Victoria Mills, N.B., 1908..	Screw 6 N H.P......	44.2	10.0	4.6	17	11	St. John, N.B.......	Scott Lumber Co., Fredericton, N.B.
Don-de-Dieu .	126,147	Sorel, Que., 1907..........	" 1 "	31.0	6.8	2.2	3	2	Sorel, Que..........	J. A. Chapdelaine, Sorel, Que.
Going	126,191	Detroit, Mich., U.S., 1881..	" 4 "	63.7	18.0	8.4	45	31	Windsor, Ont........	G. E. Brooks, Windsor, Ont.
J. B. Paine...	125,980	Toronto, Ont., 1906.......	" 4 "	39.6	8.0	5.0	11	8	Toronto............	J. B. Paine, Toronto, Ont.
Nezko........	126,215	North Vancouver, B.C., '08	" 3 "	37.1	9.8	4.0	12	8	Vancouver, B.C......	W. H. Braim, North Vancouver, B.C.
St. Williams..	100,629	St. Williams. Ont., 1908...	" 2 "	26.0	9.8	3.0	11	8	Port Dover, Ont.....	C. C. Bates, St. Williams, Ont.
Stra-Gwi-Agh	125,979	Hamilton, Ont., 1905......	" 5 "	49.5	8.5	3.0	16	11	Toronto............	H. H. Lang, Cobalt, Ont.
Tartar.......	124,355	Bowling, G.B., 1906.......	" 60 "	90.2	17.1	9.2	95	7	Vancouver, B.C......	Sechelt Towage Co., Vancouver, B.C.
Telkwa.......	126,217	Vancouver, B.C., 1908.....	" 3 "	31.8	7.6	4.0	8	6	" "	F. J. Ewing, Prince Rupert, B C.
Tim Healy....	117,180	Sandwich, Ont., 1908......	" 6 "	41.2	12.0	6.8	34	26	Windsor, Ont........	Windsor Dredging Co., Windsor, Ont.
Tuladi.......	126,216	Vancouver, B.C., 1908.....	" 4 "	49.3	14.3	6.0	32	21	Vancouver, B.C.. ...	Letson & Burpee, Vancouver, B.C.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING OCT., 1908.

Name.	No.	Where and When Built.	Rig.	Length	B'dth.	Depth.	Gross Tons	Reg. tons.	Port of Registry.	Owners.
A. V. Conrad...	126,111	LaHave, N.S., 1908.......	Schr.	101.6	27.2	10.0	......	147	Lunenburg N.S...	A. V. Conrad, M.O., LaHave, N.S.
Allans No. 1....	*126,165	Montreal, Que., 1908......	Barge	139.0	32.9	9.2	......	250	Montreal..........	H. M., H. A. and A. A. Allan, Montreal, and B. J. Allan, Boston, U.S., J.O.
Allans No. 2....	*126,166	" "	"	159.6	30.7	8.9	......	279	"	" " " "
Allans No. 3....	*126,167	" "	"	121.0	30.7	7.6	......	170	"	" " " "
Archie Crowell..	126,186	Shelburne, N.S., 1908......	Schr.	106.0	27.0	10.0	......	175	Shelburne, N.S. ...	Z. Nickerson, Port Clude, N.S.
Clifford May....	122,187	West Arichat, N.S., 1908..	"	56.6	18.1	8.0	......	43	Arichat, N.S.	I. Poirier, West Arichat, N.S.
Dorothy G......	126,112	Tancook, N.S., 1908.......	"	46.4	12.7	6.6	......	17	Lunenburg, N.S...	P. George, Whitehead, N.S.
E. C. E. No. 15.	126,216	Vancouver, B.C., 1906.....	Scow	77.0	29.0	7.7	......	150	Vancouver, B.C....	G. Coleman, Vancouver, B.C.
Emma Burke...	126,024	Ingonish, N.S., 1908......	Schr.	37.0	12.4	5.6	......	12	Sydney, N.S.......	S. S. Burke, Ingonish, N.S.
Ingonish.......	126,023	" " 1907......	"	41.0	12.7	5.0	......	16	" "	W. C., M. I. and J. L. Williams, Ingonish, N.S.
K. W. No. 10...	126,219	Vancouver, B.C., 1908.....	Scow	59.5	23.1	6.9	......	89	Vancouver, B.C....	G. C. McKeen, and L. Wilson, Vancouver, B.C.
Mur'l B. Walters	126,113	Lunenburg, N.S., 1908.....	Schr.	97.6	25.8	10.2	......	98	Lunenburg, N.S...	J. E. Backman, M.O., Lunenburg, N.S.
N. G..........	126.164	St. Michel, Que., 1908.....	Sloop	110.3	23.1	7.9	......	143	Montreal..........	N. Gervais, St. Michel d'Yamaska, Que.
Organ.........	126,064	Port Elgin, N.B., 1908.....	Schr.	60.8	19.6	7.0	......	46	Charlottetown, P.E.I	A. Grant, Port Elgin, N.B.
Revenue.......	126,114	Lunenburg, N.S., 1908.....	"	102.6	26.0	10.5	......	99	Lunenburg, N.S...	B. Cook, M.O., Rose Bay, N.S.
Sandy Hook....	126,094	....	Barge	138.7	32.0	9.8	......	214	St. Catharines, Ont.	J. Battle, Thorold, Ont.
Tobeatic.	126,036	Liverpool N.S., 1908......	Schr.	102.5	25.5	10.6	......	99	Liverpool, N.S.....	A. W. Hendry, Liverpool, N.S.
Wm. Davidson..	126,253	Chatham, N.B., 1908......	"	67.8	20.4	8.0	......	61	Chatham, N.B.....	W. S. Loggie Co., Chatham, N.B.

*Rebuilt.



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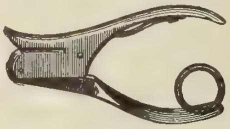

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Registration of Ships' Names.

The Governor-General in Council has approved the regulations relating to ships' names as follows:

Any person who proposes to make application for the registry of a British ship, in Canada, shall give notice in writing of the proposed name of the ship to the Registrar of Shipping at the intended port of registry at least 14 days before the date on which it is contemplated to effect the registry.

The Registrar at that port shall transmit the notice to the Deputy Minister of Marine.

If the proposed name does not appear already as the name of a registered British ship, or if it is not a name so similar to that of a registered British ship as to be calculated to deceive, the Deputy Minister of Marine shall issue a certificate to that effect to the registrar at the port at which the ship is to be registered, and the ship shall be registered under that name provided all requirements for registry have been duly complied with.

If the proposed name is found to be already the name of a registered British ship, or so similar as to be calculated to deceive, the Deputy Minister of Marine may refuse the registry of the ship by that name, and shall intimate his decision to the Registrar at the intended port of registry and to the applicant for registry.

Vessels Removed from the Register.

The following vessels were removed from the Canadian register in Oct. for the reasons assigned: Steam—Angler, Winnipeg, 11 tons, broken up; Beaver, Winnipeg, 23 tons, broken up; Caro, Winnipeg, 10 tons, broken up; D. L. Mather, Winnipeg, 70 tons, broken up; Defender, New Westminster, B.C., 137 tons, broken up; Flying Cloud, Winnipeg, 4 tons, broken up; Gordon M., Winnipeg, 2 tons, broken up; Harry Montgomery, 2 tons, broken up; Herbert M., Toronto, 18 tons, dismantled; Ida, Winnipeg, 13 tons, broken up; Irlene, Winnipeg, 6 tons, dismantled; Millie Howell, Winnipeg, 16 tons, broken up; Pontiac, Ottawa, 97 tons, burnt; Richmond, Winnipeg, 10 tons, broken up; Rover, Owen Sound, Ont., 35 tons, broken up; Sultana, Winnipeg, 243 tons, broken up; Zuleika, Sydney, N.S., 8 tons, foundered. Sailing—Annie B., Winnipeg, 14 tons, broken up; Arequipa, Arichat, N.S., 36 tons, broken up; Berens River, Winnipeg, 335 tons, wrecked; C. E. Robertson, Winnipeg, 28 tons, broken up; City of Alberton, Winnipeg, 39 tons, broken up; Gimli, Winnipeg, 30 tons, broken up; Gentile, Guysborough, N.S., 34 tons, broken up; Golden Rule, Shelburne, N.S., 149 tons, wrecked; Grenada, Windsor, N.S., 635 tons, abandoned at sea; Katie, Liverpool, N.S., 14 tons, broken up; Landskrona, Windsor, N.S., 1,330 tons, sold to foreigners; Lois, Charlottetown, P.E.I., 67 tons, broken up; Lulu, Winnipeg, 23 tons, broken up; Max, Winnipeg, 26 tons, broken up; Nora Wiggins, Yarmouth, N.S., 470 tons, abandoned at sea; Ogema, Winnipeg, 44 tons, broken up; Piper, Winnipeg, 17 tons, broken up; Rose, Winnipeg, 77 tons, broken up; Rozzie, Sydney, N.S., transferred to Newfoundland; Sabaskong, Winnipeg, 17 tons, broken up; Sunbeam, Winnipeg, 2 tons, broken up; Thistle, Winnipeg, 23 tons, dismantled; Utopia, Charlottetown, P.E.I., 98 tons, wrecked; Vesta, Pictou, N.S., 64 tons, broken up; W. P. Andrews, Winnipeg, 28 tons, broken up.

Montreal Harbor Facilities and the St. Lawrence Route.

The completion of the construction of a series of 14 two-storey steel structural sheds at the Montreal harbor was signalized, recently, by the ceremonial driving of the last rivet by the Dominion Minister of Marine. At a subsequent luncheon, in shed 11, Hon. L. P. Brodeur said: We have spent upwards of $150,000,000 in improving the St. Lawrence route, or considerably more than we have given in the form of subsidies to all the existing railways in the Dominion, omitting those built by the Government. This immense sum, which comprises the capital outlay on canals, harbors and dredged channels, together with the excess of cost of maintenance over revenue from the beginning, has been laid out by two or more generations of Canadians, for the purpose of keeping Canadian traffic as far as possible in Canadian hands, and of enabling us to participate in the conveyance, by this great natural waterway, of the products of the American west to the Atlantic, in competition with the railways and the more or less artificial waterways of the U.S. It has long been apparent, however, that in proportion to the quantity of export grain raised in the western and northwestern States then and now, the Canadian route is not carrying anything like so large a share as it should. The truth is that, like the Erie Canal, it has never been physically capable, in recent times at any rate, of meeting the requirements of the enormous traffic created by the rapid development of the west. When the Welland canal, the key of the route, was projected 90 years ago, the west, as then comprehended, did not extend beyond Lake Erie. The wheat belt of the U.S. was in northern New York and Ohio, while that of Canada was slowly advancing up the peninsula between Toronto and Windsor, but, in an incredibly short space, the whole face of things was altered by the onward march of civilization, and, though it was enlarged more than once, the Welland soon fell so far behind the procession of events that, as is now the case with the Erie Canal, the transportation interests began to prize it more on account of its usefulness as a regulator of rates in the navigation season than for its services as a carrier. The last enlargement was completed in 1887 and the canal is now 14 ft. deep, as are the canals between Prescott and Montreal. On the other hand, the natural channels in the Upper Lakes have been dredged to a depth of 20 ft. or more, and the Canadian and U.S. canals at Sault Ste. Marie, which connect Lakes Superior and Huron, are of like capacity. Hence it has come about that most of the steam freighters on the Upper Lakes, the more recently built of which are capable of carrying nearly 15,000 tons in a single cargo, are excluded from the Welland, and consequently from Lake Ontario and Montreal, almost as effectually as though they belonged to another planet. They convey Canadian and U.S. grain to Buffalo, from which point it is portaged, so to say, by rail to New York, Boston and other U.S. ports. No vessel carrying over 75,000 bush. can navigate the Welland canal without first lightering at Port Colborne, whereas the big vessels on Lake Superior regularly take cargoes of 250,000 or 300,000 bush. to Buffalo. Moreover, within the last decade or two the U.S. railways, by improving their roadbeds and rolling stock, have put themselves in a position to transport wheat at a low rate from Chicago to New York, while our Canadian railways have established a lake-and-rail route via Lake Huron and Georgian Bay ports to Montreal. The grain, both Canadian and U.S., is carried by vessels from Fort William, Duluth or Chicago to Midland, Depot Harbor, Collingwood, Owen Sound or Goderich, and conveyed thence by rail to the ocean steamer at Montreal, or, when the St. Lawrence navigation closes, to the ocean steamer at St. John or Portland.

An enormous population has flocked to the region bordering the Upper Lakes, and industries have arisen which supply an immense vessel traffic, such as the iron ores and copper deposits and the coal and lumber trades, to say nothing of the progress of grain-growing in the northwestern States. On the Canadian side of the Upper Lakes we are making very satisfactory progress in mining and other lines of industry; whilst the wheat belt of North America is now centering in our prairie provinces. Beyond them lie the harvest fields of Alberta, which have begun to export wheat and flour to the Orient. The stream of population from Europe, which till lately emptied itself almost exclusively into the U.S., is now turning to the Canadian West, which is likewise profiting by a wonderful inrush of U.S. labor and capital, attracted by our cheap lands as well as by our good laws. There is authority for saying that in the last ten years, or since what is termed the American invasion of the Canadian West began, U.S. immigrants have brought into western Canada and spent in the purchase and exploitation of farms,

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie canals in October:

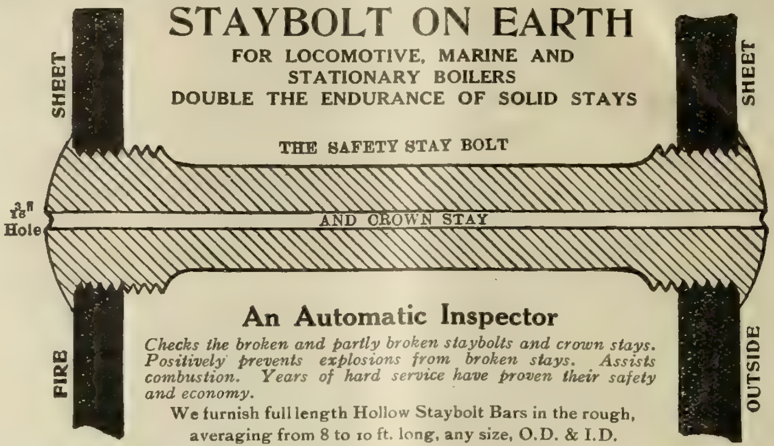
Articles.			Canadian Canal	U.S. Canal	Total
Copper	Eastbound	Net tons	1,794	9,073	10,867
Grain	"	Bushels	3,749,649	3,491,532	7,241,181
Building stone	"	Net tons	....	....	....
Flour	"	Barrels	419,225	811,560	1,230,785
Iron ore	"	Net tons	1,605,716	3,220,817	4,826,533
Pig iron	"	"	....	1,014	1,014
Lumber	"	M. ft. B.M.	4,460	50,988	55,448
Wheat	"	Bushels	12,879,522	7,228,076	20,107,598
General merchandise	"	Net tons	4,959	15,624	20,583
Passengers	"	Number	583	825	1,408
Coal, hard	Westbound	Net tons	46,980	105,951	152,931
Coal, soft	"	"	289,774	878,326	1,168,100
Flour	"	Barrels	105	....	105
Grain	"	Bushels	4,700	....	4,700
Manufactured iron	"	Net tons	24,692	18,016	42,708
Iron ore	"	"	....	....	....
Salt	"	Barrels	5,138	56,135	61,273
General merchandise	"	Net tons	61,752	65,882	127,634
Passengers	"	Number	565	321	886
Vessel passages		Number	774	1,568	2,342
Registered tonnage		Net	1,797,833	3,883,246	5,631,079
Freight—Eastbound		Net tons	2,133,237	3,717,227	5,850,464
" Westbound		"	424,023	1,076,595	1,500,618
Total freight		"	2,557,260	4,793,822	7,351,082

SHERIFFS
MANUFACTURING CO.

MILWAUKEE, WIS., U.S.A.
ESTABLISHED 1854

THE MOST ECONOMICAL AND SAFEST STAYBOLT ON EARTH

FOR LOCOMOTIVE, MARINE AND STATIONARY BOILERS
DOUBLE THE ENDURANCE OF SOLID STAYS



An Automatic Inspector

Checks the broken and partly broken staybolts and crown stays. Positively prevents explosions from broken stays. Assists combustion. Years of hard service have proven their safety and economy.

We furnish full length Hollow Staybolt Bars in the rough, averaging from 8 to 10 ft. long, any size, O.D. & I.D.

We also make solid staybolt bars of the best double refined charcoal iron. Average length, 16 to 20 ft.

FALLS HOLLOW STAYBOLT CO., CUYAHOGA FALLS, OHIO

Ticket Agts. Please Note

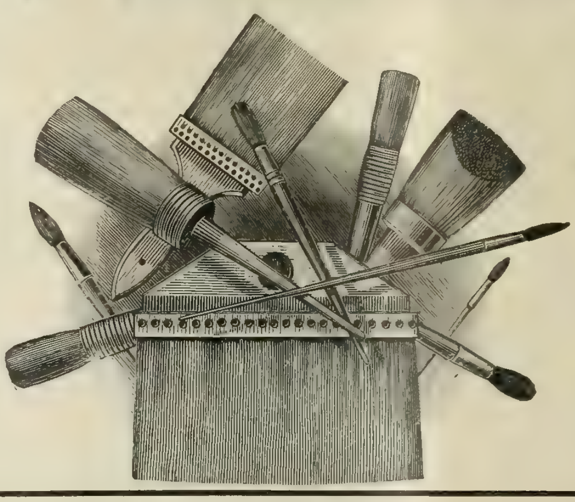
Where **ILLINOIS CENTRAL RAILROAD COMPANY** has through car service both Coach and Sleeper and Free Chair Cars,
Chicago to Hot Springs, Ark., St. Louis, Nashville, Omaha, St. Paul and Minneapolis, Memphis, Tenn., New Orleans, San Antonio, Texas and all California,
On first and third Tuesdays each month until further notice through tourist sleeping car without change, Chicago to Houston, Texas, leaving 6 p.m., on above Tuesdays. Very low abnormal rates, "Homeseekers," as for instance, Chicago to Houston and return, $25.00; New Orleans the same, good 30 days. Special homeseekers' round trip rates to the South and Southwest.

Tourist rates to Arizona, Mexico, and California, liberal stopover privileges. Rates via New Orleans as low as via any other route.

Look the Illinois Central map over and consult
G. B. WYLLIE, Canadian Passenger Agent
305 ELLICOTT SQUARE, BUFFALO, N.Y.
Or F. S. Bishop, G.E.P.A., 333 Broadway, New York City.

WOLFE BRUSH COMPANY

JOHN H. HULTS, PRESIDENT



Successors to
WOLFE, WALKER & CO., LTD.

General Offices and Factory:
South 15th and Bingham Streets
Retail Store, 505 Liberty Street
PITTSBURG, PA.

Manufacturers of Superior
Brushes
Especially Designed For
Rail Roads

STEEL, PEECH & TOZER,
LIMITED,
SHEFFIELD, ENGLAND.
STEEL AXLES, TYRES, AND SPRING STEEL.

"PHŒNIX" Loco. Spring Steel is the accepted Standard in Canada.

SOLE AGENTS:
James Hutton & Co., Montreal.

THE JOHN McDOUGALL CALEDONIAN IRON WORKS CO.
LIMITED
MONTREAL, P.Q.

BOILERS
Return Tubular, McDougall Water Tube, etc.
TANKS
Water Tanks, Penstocks, Filters.
MACHINERY
Complete Power Plants designed and installed.

Sole Manufacturers in Canada for Worthington Turbine Pumps and Doble Impulse Water Wheels.

DISTRICT SALES OFFICES

MONTREAL—82 Sovereign Bank Building.
WINNIPEG—251 Notre Dame Avenue.
NELSON—Josephine Street.
TORONTO—810 Traders Bank Building.
VANCOUVER—416 Seymour Street.
NEW GLASGOW, N.S.—Telephone Bldg.

THE VICTORIA ROLLING STOCK CO. OF ONTARIO, LIMITED

NOTICE is hereby given that a dividend of six per cent. on the paid-up capital stock of the Company for the half-year ended Nov. 30th, 1908, has been declared payable Dec. 1st, 1908, to the shareholders on record as of the 30th of Nov., 1908.

By order of the Board,
R. A. SMITH, Secretary.
Toronto, Nov. 19th, 1908

An award of $2,000 as damages was made recently against the C.P.R., at Brantford, Ont., in favor of a man who lost an arm while being put off a train, on which he was taking a free ride.

THE CANADIAN BRONZE COMPANY, LTD.

Brass Wearing Parts for Locomotives.
Journal Bearings for Freight and Passenger Service.
Babbitts Miscellaneous Brass Castings for Railroads.

Works and Office: 69 DELORIMIER AVENUE, MONTREAL, QUE.

timber limits, elevators, mines, stores and what not, not less than $400,000,000, or far more than our net federal debt and the net debts of all the individual provinces combined.

I am obliged to acknowledge, however, that, owing to the various causes just mentioned, the St. Lawrence route is not participating to the extent we once thought it would in the gigantic traffic moving every year between the west and the east. To be sure, whenever Upper Lake rates are abnormally low, it asserts its natural supremacy. This season wheat has been carried from Fort William and Duluth, through the Welland to Montreal, for from 3¾ to 4c. per bushel, with corresponding quotations for other grains. These figures, which the lake-and-rail route by Buffalo to New York cannot approach, account for the recent large increase in the export grain trade of Montreal, which has created such consternation in New York. I need scarcely tell you that the Government has given and will continue to give the closest study to a matter of such grave national moment. At present about 15,000,000 bush. of wheat from the Canadian Northwest are shipped every year to Buffalo for export to Europe by New York, Boston, Philadelphia and Baltimore. Over and above this, some 5,000,000 bush. of Canadian wheat are carried to Portland for export. A considerable quantity of Canadian flour is also shipped to Europe from U.S. seaports.

I do not suppose that, by the construction of the Georgian Bay canal and the reconstruction of the Welland, we could entirely stop the exports of Canadian produce from the U.S. seaboard. The Canadian Northwest wheat, which goes from Fort William and Duluth to Buffalo, is carried there mostly by U.S. vessels at the tail end of the season, when Canadian vessels have all they can do on the Canadian routes. The Buffalo route, in short, is a second string to our bow, which on occasions is quite useful. But with these two new Canadian waterways we could certainly carry to Montreal in summer and to St John in winter a vastly greater quantity of Canadian-grown wheat, together with a vastly greater quantity of U.S. grain from Upper Lake points. In other words, the St. Lawrence would then become a truly important outlet for the produce of the U.S. Northwest, besides receiving the great bulk of the constantly increasing yield of the Canadian West.

The improvement of the St. Lawrence between Montreal and Quebec was undertaken 60 years ago, and the other day we succeeded in establishing a uniform depth of 30 ft., with a wider channel and with acetylene buoys that at night make it look like a well-lighted street. The result is that insurance rates on hulls and cargoes have been reduced, whilst by the improvements of the Montreal harbor, the Harbor Board has cut the cost of handling freight from the car to the vessel in two. Montreal, in fact, is now for the first time taking a proper place among the great seaports of the American continent. There has been a large increase in the ocean tonnage frequenting the St. Lawrence, and, in consequence, ocean rates have fallen to the advantage of the Canadian farmer, who exports, and of the Canadian consumer, who buys goods from abroad. You can form some idea of all that this means when I recall that Montreal is nearly 1,000 miles inland from the open Atlantic at the Strait of Belle Isle, and not long ago the channel between it and Quebec was only 10 or 11 ft. deep. No work of the kind in any other country—not even the conversion of Glasgow into a seaport by the deepening of the Clyde or that of Manchester through the construction of a ship canal—is more wonderful or more interesting from a transportation point of view. We cannot abolish the Canadian winter, which breaks the continuity of business on the St. Lawrence, obliging vessels to go elsewhere for five months of the year; but we have done everything that human ingenuity can suggest to minimize the natural drawbacks. Further, we have begun certain much-needed improvements in the river below Quebec, and shall devote attention to others, with the object of making that splendid port more efficient and more splendid still. To maintain Canada's rapid commercial development, its needs must be supplied as soon as possible. Montreal being at the head of 1,000 miles of inland navigation, it is essential that the largest ocean vessels come to this port. This can only be made possible by deepening the channel, by improving the lighting system, by establishing more and better buoys, and by placing fog signals.

Among the Express Companies.

F. Norman, heretofore route agent, has been appointed agent Canadian Ex. Co., Winnipeg.

The Canadian Ex. Co. has opened offices at Cedar Springs and Charing Cross, Ont., and Lakeside, Que.

The Canadian Ex. Co. is being proceeded against at Sussex, N.B., under the Scott Act, for shipping intoxicating liquors.

The Canadian Ex. Co. has closed its offices at various points on Muskoka Lakes, at Norway Point and Port Arthur, Ont., for the winter season.

The Canadian Northern Ex. Co. has opened offices at Zephye, Ont.; Underhill, Grays, Hilton, Rossendale and Rounthwaite, Man.; and Dalmeny, Sask.

The Dominion Ex. Co. recently sued A. Krigbaum, Toronto, for $470 due as proceeds of money orders delivered by the company to him as agent, and for which he accepted responsibility of due issue and sale.

The Canadian Northern Ex. Co. has recently made the following appointments: J. W. Murray, Route Agent, Battleford, Sask.; T. H. Tebo, Agent, Portage la Prairie, Man.; G. W. Stevens, Agent, Edmonton, Alta.

The following requisition, which at first sight may be taken for a schoolboy's exercise in Esperanto, was received by a Dominion Ex. Co.'s agent at Winnipeg:

"Der Sir: Please sent me Domean Ekospress entlopes please sent me those Recived Ekospress Recived Ekospress Co. Please sent me a few dozant. One dozant Ekospress Co. seale up. Please sent me the Domean Ekospress entlope and them Recived and sent one doz of fer sealed the Ekospress entlopes."

The Fruit Growers' Association of Ontario at its annual convention in Toronto, Nov. 10 made its annual complaint as to alleged high rates charged by the express companies, and contended that if the Manitoba trade was to be held by these companies it would be necessary to reduce the express rates, or in the alternative, press for a revision of the tariff on Californian fruit.

W. H. Burr, heretofore Auditor Dominion Express Co. and Western Express Co., has been appointed Traffic Manager of both companies, and in addition to his duties as such will have general supervision over the accounting, money order and tariff departments. On matters of detail, address, for the Audit or Accounting Department, W. H. Plant, Toronto; Money Order Department, W. H. Blackhall, Toronto; Tariff Department, H. L. Meyer, Superintendent, Toronto.

The Canadian Ex. Co.'s C.R.C. tariff 4, C.R.C. 1033, which provides that the rates contained therein apply between all points, has been altered to read "from offices in the fruit district to all other offices." The company has also changed the estimated weights of fruit baskets, covered by the Fruit Tariffs, C.R.C. 1033 and 1174, to read as follows:

12—6-qt. baskets (8¼ lbs. each) as 100 lbs.
7—9-qt. " (15 lbs. each) as 100 lbs.
6—11-qt. " (16½ lbs. each) as 100 lbs.

The Board of Railway Commissioners issued the following order, 5493, Oct. 22. "In the matter of the application of the Express Traffic Association of Canada, acting on behalf of the express companies carrying on business in Canada, which are members of the Association, for an order temporarily approving The Express Classification for Canada, Tables of Graduated Charges, and Money Classification C.R.C. 1, 2, and 3 respectively; and granting permission to the applicants to use the same pending the formal approval by the Board of the tolls of express companies, filed on July 2, 1908: Upon what was alleged by counsel in support of the application, and the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the Express Classification for Canada, C.R.C. 1 the Tables of Graduated Charges for packages weighing less than 100 lbs., C.R.C. 2, and Money Classification, C.R.C. 3, filed by the applicants, be temporarily approved, and the applicants be permitted to use the same pending the formal approval by the Board of the classification and tolls of express companies. And it is further ordered that this order be not construed as in any way affecting or prejudicing the consideration and determination by the Board of the tolls filed by the express companies for approval."

Telegraph and Cable Matters.

The G.T. Pacific Ry. telegraphers have petitioned for an increase in wages from $60 to $67.50 a month, which latter they claim is paid by other railways.

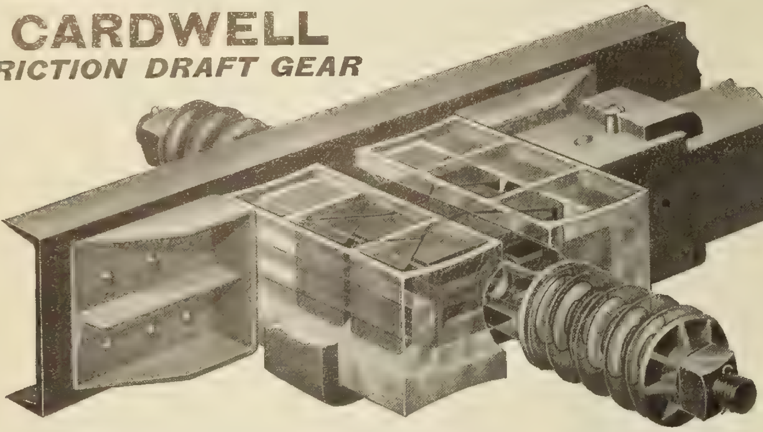
H. V. Meredith, of Montreal, has been elected one of the trustees of the Mackay Companies, the other Canadian trustee being R. A. Smith, of Toronto.

F. B. Rose, formerly telegraph operator and station agent, C.P.R., Bordeaux, Que., was arrested recently at Fallsburg, N.Y., on a charge of having embezzled $980 from the company.

REAMERS ALL KINDS OF REAMERS FOR RAILROAD SHOPS AND BRIDGE BUILDING

BUTTERFIELD & CO., ROCK ISLAND, QUE.

HAND, MACHINE AND TAPPER TAPS, STAY BOLT TAPS, BOILER AND PATCH BOLT TAPS. QUALITY UNSURPASSED.



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Manufacturers of CARDWELL ROCKER SIDE BEARINGS.

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RAILWAY EQUIPMENT
No. 244 Railway Exchange
CHICAGO

Coaches
All Classes
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RE-BUILT AND SPECIAL CARS TO MEET ANY REQUIREMENTS

JOHN S. METCALF CO.
ENGINEERS AND CONTRACTORS FOR
GRAIN ELEVATORS ONLY
CONCRETE—STEEL—WOOD
Plans and Specifications our Specialty
MIDLAND, ONTARIO CHICAGO, ILL.

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MONTREAL, CANADA.

BARE AND INSULATED ELECTRIC WIRE
Electric Light Line Wire, Incandescent and Flexible Cords,
RAILWAY FEEDER AND TROLLEY WIRE
Americanite, Magnet, Office and Annunciator Wires,
Cables for Aerial and Underground Use.

Delaware & Hudson
RAIL AND STEAMER LINES
Shortest, Quickest and Best Rail Line between
MONTREAL AND NEW YORK

Trains leave Montreal 7.20, 10.05 a.m., 7.00 and 8.00 p.m. Steamers through Lake Champlain the Magnificent and Lake George the Beautiful, which connect with trains to Albany via Saratoga Springs.

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W. H. HENRY, Can. Pass. Agent,
286 St. James Street, Montreal, P.Q.
A. A. HEARD, Gen. Pass. Agent,
Albany, New York.

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For officials and employes of Railway, Steamship, Express, Telegraph and other companies, Yacht Clubs, Etc.
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Embroidery in Gold and Silver Bullion.
W. H. CODDINGTON
HAMILTON - - ONTARIO

IMPERIAL BANK
OF CANADA
CAPITAL AUTHORIZED - - $10,000,000.00.
CAPITAL PAID UP - - 4,990,000.00.
REST - - - - 4,990,000.00.
Agents—London, Eng., Lloyds Bank Limited; New York, Bank of the Manhattan Co.
Sterling exchange bought and sold. Letters of credit issued available in any part of the world.
Savings Bank—Interest allowed on deposits from date of deposit, and credited quarterly.
A general Banking business transacted.
Branches in
Provinces of Ontario, Quebec, Manitoba, Saskatchewan, Alberta and British Columbia.
HEAD OFFICE - - TORONTO

Anti-Rail Creepers
Made under Laas & Sponenburg, Canadian patents Nos. 97586, 97268, 97269.
Shipments made from Walkerville, Ontario.
Belle City Malleable Iron Co.
RACINE, WIS.

FOR TICKET CASES AND COMMERCIAL FURNITURE
Of all descriptions to stock or special design, Apply to
The Canadian Office and School Furniture Co. Limited
Preston, Ontario

J. Mitchell, manager of the New York Herald telegraph department, who died Nov. 3, was born at St. John's, Nfld., and was in the service of the Anglo-American Telegraph Co. there, prior to going to the U.S. in 1878.

The Canadian Northern Telegraph Co. has opened an office at Regina, Sask., for the purposes of general business, following the opening of the telegraph line between Winnipeg and Regina, Oct. 12, mentioned in our last issue.

The British Postmaster-General is offering a prize for the most artistic design of a telegraph pole, suitable for urban use, and it has been suggested that the Canadian Government adopt a similar course and thus help to rid Canadian cities of one of their greatest eyesores.

G. Marconi is reported to have said, regarding the proposal to cheapen cable rates across the Atlantic, that he would be prepared to transmit messages at a penny a word, provided the cost of operating the stations on each side be paid in addition to a reasonable subsidy.

J. Milward, General Manager in Australia of the Pacific Cable Board, who has been visiting in Canada, was for a number of years connected with the Eastern Telegraph Co., and on the laying of the Pacific cable, was appointed Chief Electrician, and subsequently General Manager, on the death of G. M. Reynolds.

In the case of the North American Telegraph Co. vs. the Bay of Quinte Ry. Co., at the Toronto Assizes, Nov. 6, Sir Wm. Mulock advised the companies to discuss the question involved and try to agree on a working basis for the future. The dispute relates to the free transportation of the Telegraph Co.'s employes on the Railway Co.'s trains, which, it is claimed, is according to agreement. Should no decision be arrived at privately by the parties, the arguments will be submitted in writing to the court for consideration and judgment.

The Board of Railway Commissioners issued order 5488, Oct. 22, as follows: In the matter of the application of the Grand Trunk Pacific Telegraph Co. for the approval of the tolls to be charged by it for messages to be transmitted over the portions of its line in Manitoba, Saskatchewan and Alberta. Upon the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the Tariff of Telegraph Tolls filed Sept. 29, 1908, applying to messages transmitted between the offices of the company in Manitoba, Saskatchewan and Alberta, be temporarily approved, with the exception of the special press rate of ¼c. a word, day and night, between Winnipeg and Edmonton; and that the company be authorized to charge and collect the tolls hereby approved until, unless otherwise ordered, the Board shall dispose of the question of telegraph tolls generally.

Hon. R. Lemieux, Canadian Postmaster-General, at a meeting held in London, Eng., Nov. 10, to consider the question of cheapening the cable service generally, is reported to have said that he believed cheap cabling was the key to all the really momentous problems which confronted statesmen and merchants. Speaking for himself, he looked upon penny-a-word cables as an ideal and as a blessing which some day, sooner or later, should be attained and secured. Having referred to the effect of laying the Pacific cable in a great reduction of rates to Australia, he thought still more hopeful results could be achieved on the Atlantic side, where there must be a large increase of business within a short time, for after 50 years the companies' rates were still prohibitive to the great majority of people. Politically and commercially, everyone admitted that penny-a-word cables was a step in the right direction. He hoped the idea would be pressed, and an unbiased inquiry be made into its feasibility. It was suggested by Lord Strathcona, that the Governments concerned should join in laying a cable between Great Britain and Canada, and reduce the rates to begin with to 2½d. a word.

The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Supplies, &c.

Accident Insurance
Canadian Ry. Accident Ins. Co.....Ottawa, Ont.

Aerated Waters
E. L. Drewry.................Winnipeg.

Air Brakes and Fittings
Canada Foundry Co..................Toronto.
Canadian Westinghouse Co......Hamilton, Ont.

Ales
E. L. Drewry.....................Winnipeg.

Alloys
Goldschmidt Thermit Co...............Toronto.

Angle Bars
Hamilton Steel & Iron Co.......Hamilton, Ont.
Montreal Rolling Mills Co...........Montreal.

Anti Rail Creepers
Belle City Malleable Iron Co.......Racine, Wis.

Automobiles
Polson Iron Works, Ltd...............Toronto.

Axes
James Smart Mfg. Co...........Brockville, Ont.

Axe Steel
Montreal Steel Works................Montreal.

Axles
James Hutton & Co..................Montreal.
Jas. W. Pyke & Co..................Montreal.
Rhodes, Curry & Co.............Amherst, N.S.

Badges
R. Woodman Mfg. & Supply Co...Boston, Mass.

Baggage Checks
R. Woodman Mfg. & Supply Co...Boston, Mass.

Beacons
International Marine Signal Co........Ottawa.

Bearings, Side
Cardwell Mfg. Co..................Chicago, Ill.
Chicago Railway Equipment Co.....Chicago, Ill.
Dominion Car and Foundry Co........Montreal.

Blankets and Bedding
The Hudson's Bay Co....

Blasting Powder
Standard Explosives Limited..........Montreal.

Boilers
Babcock & Wilcox (Ltd.)..............Montreal.
Canada Foundry Co..................Toronto.
Jno.McDougall,Caledonian IronWorks Co.Montreal
Polson Iron Works....................Toronto.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Portable
Canada Foundry Co..................Toronto.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Stationary and Marine
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co., Ltd........Amherst N.S.

Boiler Staybolt Iron or Steel Bars
Falls Hollow Staybolt Co..Cuyahoga Falls, Ohio.

Boilers, Steam
Babcock & Wilcox (Ltd.)..............Montreal.
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Water Tube
Babcock & Wilcox (Ltd.)..............Montreal.
Jno.McDougall Caledonian IronWorks Co.Montreal
Robb Engineering Co., Ltd........Amherst, N.S.

Boilers, Tubes
Jas. W. Pyke & Co...................Montreal.

Bolsters
Dominion Car and Foundry Co.........Montreal.

Bolts, Bridge
Montreal Rolling Mills Co............Montreal.
Toronto Bolt and Forging Co...........Toronto.

Bolts, Carriage and Machine
Toronto Bolt and Forging Co...........Toronto.

Bolts, Track
Montreal Rolling Mills Co............Montreal.
Toronto Bolt and Forging Co...........Toronto.

Box Car Loaders
Mussens Limited......................Montreal.

Brake Beams
Chicago Railway Equipment Co......Chicago, Ill.
Dominion Car and Foundry Co.........Montreal.

Brake Shoes
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co.........Montreal.
N. J. Holden Co., Ltd................Montreal.
Railway Materials Co..........New York City.

Brass and Copper Cloth
The B. Greening Co............Hamilton, Ont.

Bridge Numbers
Acton Burrows Limited................Toronto.

Bridges
Canada Foundry Co...................Toronto.
Canadian Bridge Co..........Walkerville, Ont.
Dominion Bridge Co...................Montreal.

Buckets, Coal, Ore and Concrete
Canadian Fairbanks Co., Ltd..........Montreal.

Bumping Posts
McCord & Co......................Chicago, Ill.

Buoy Lighting
Safety Car Heating and Lighting Co..New York.

Buoys
International Marine Signal Co........Ottawa.

Cables, Electric and Feeder
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co...............Montreal.

Caps
W. H. Coddington..............Hamilton, O

Car Castings
American Brake Shoe & F'dry Co..Mahwah, N.J.
Canadian Iron and Foundry Co........Montreal.

Car Cleaner
Modoc Soap Co...............Philadelphia, Pa.

Car Closets
Duner Co........................Chicago, Ill.

Car Curtains and Fixtures
N. J. Holden Co., Ltd................Montreal.

Car Heating
Canadian Gold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Lighting
Canadian Cold Car Heating & Light'g Co.Montreal.
Safety Car Heating and Lighting Co...New York.

Car Movers
Canadian Fairbanks Co., Ltd..........Montreal.
F. H. Hopkins & Co..................Montreal.
Mussens Limited.....................Montreal.
R. Woodman Mfg. & Supply Co...Boston, Mass.

Car Replacers
Alexander Car Replacer Mfg. Co....Scranton, Pa.
N. J. Holden Co., Ltd................Montreal.
F. H. Hopkins & Co..................Montreal.

Car Seals
R. Woodman Mfg. & Supply Co....Boston, Mass.

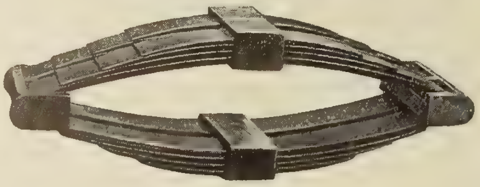
Car Wash Brushes
Wolfe Brush Co.................Pittsburg, Pa.

Cars
American Car and Equipment Co....Chicago, Ill.
Canada Car Co. (Ltd.)................Montreal.
Canadian Fairbanks Co. Ltd..........Montreal.
Crossen Car Mfg. Co..............Cobourg, Ont.
Dominion Car and Foundry Co........Montreal.
J. T. Gardner....................Chicago, Ill.
Hart-Otis Car Co. (Ltd.)..............Montreal.
Hotchkiss, Blue & Co..............Chicago, Ill.
Ottawa Car Co., Ltd...................Ottawa.
Preston Car and Coach Co., Ltd...Preston, Ont.
Rhodes, Curry & Co...............Amherst, N.S.

Car Windows
O. M. Edwards...................Syracuse, N.Y.

Castings
Crossen Car Mfg. Co..............Cobourg, Ont.
Standard Steel Works Co......Philadelphia, Pa.

Castings, Brass
Canadian Bronze Co..................Montreal.
Canadian Iron and Foundry Co........Montreal.
Kerr Engine Co.............Walkerville Ont.



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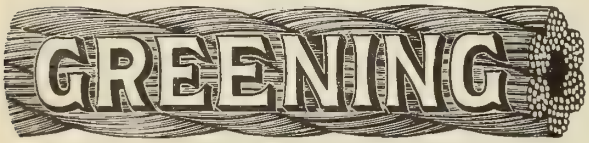
ELLIPTIC
SEMI-ELLIPTIC
AND SPIRAL SPRINGS
OF EVERY DESCRIPTION

MANUFACTURED BY
B. J. Coghlin & Co., 432 St. Paul St., Montreal, Can.



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Standard and Lang's Patent Lay.
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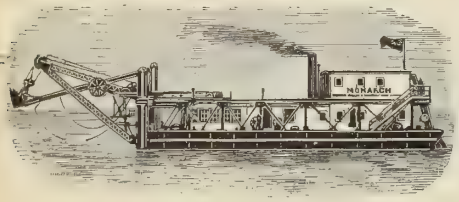
PROMPT SHIPMENTS.

THE B. GREENING WIRE CO., Limited,
HAMILTON, ONT. MONTREAL, QUE.



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HOISTING ENGINES, CENTRIFUGAL PUMPS FOR WATER AND SAND, STONE DERRICKS, CLAM-SHELL BUCKETS, STEEL SKIPS, COAL AND CONCRETE TUBS AND OTHER CONTRACTORS' MACHINERY.

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ALL CLASSES REBUILT
FREIGHT AND PASSENGER
CAR REPAIRS

AMERICAN CAR & EQUIPMENT CO., 1538 Monadnock, Chicago, Ill.

THE HIRAM L. PIPER COMPANY, LIMITED
MANUFACTURERS MONTREAL 17 to 23 NORMAND ST.
RAILWAY Lamps, Signals and Supplies.
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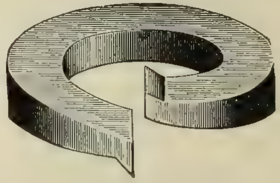

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